A Nomenclator of Mexican and Central American Rubiaceae

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Cover illustrations by Anna Stone. Counterclockwise from top: *Rondeletia pringlei* Lorence, *Crusea andersoniorum* Lorence, *Glossostipula strigosa* Lorence.

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INTRODUCTION

This work initially began as a nomenclatural compilation for ongoing revisionary and floristic studies of Mexican and Central American Rubiaceae, including treatments for the *Flora Mesoamericana*, *Flora of Chiapas*, *Flora de Oaxaca*, and *Flora de Veracruz* projects. Its primary purpose is to provide a comprehensive nomenclatural index of the published names of Rubiaceae from all of Mexico and the countries comprising Central America, and to indicate their current taxonomic and nomenclatural status. Names of taxa described from other areas, principally South America, the West Indies, and the southwest United States, have also been included if authentic records of their occurrence in Mexico or Central America exist. Names that have been erroneously applied to taxa in this region are also included. Taxa that are known from cultivation, have become naturalized, or have escaped from cultivation in the region are also included, and their status is noted. This work includes ca. 2341 entries of specific and infraspecific names published during the period from 1753 through 1997, plus several more published to mid-1998.

The following herbaria were inventoried for Rubiaceae types from the region: ENCB, F, MEXU, MO, P, US, and XAL. In addition, type material of selected taxa was borrowed from a number of other herbaria including: CAS, GH, K, TEX-LL, UC, and WIS. Black and white photos have been taken of most types and sets of duplicate prints deposited at MEXU, PTBG, and US. The original literature sources in which the names were published have been checked in nearly all cases.

All type collections have been seen by the author, unless indicated by "n.v." (non visi). Article 9.1 of the *International Code of Botanical Nomenclature* [Tokyo Code] (Greuter et al., 1994) states "A holotype of a name of a species or infraspecific taxon is the one specimen or illustration used by the author, or designated by the author as the nomenclatural type." Names published prior to the *Code*, however, are frequently associated with typification problems. It was often the practice of various authors (e.g., Ruiz López and Pavón, or Sessé and Moçiño) to base their descriptions and sometimes also their illustrations primarily or entirely on plants studied in the field, or even on a mixture of specimens of the same taxon. In these cases a type was not designated and apparently does not exist, which I have noted in the text. Alternatively, authors would sometimes cite a locality (usually a country or island) and collector's name, suggesting that they were referring to a single specimen, although this is difficult to prove. Recommendation 9A.4 of the *Code* states that if a single specimen is cited in the protologue, without mention of a specific institution housing it, a specimen at the author's home institution can be regarded as the holotype until it can be proven that more than one specimen exists. In these cases I have cited locality and collector information from the protologue and simply noted "type," followed by the probable herbarium in which the type material may be sought, usually the author's home institution. Monographic or revisionary studies may be required to determine the status of any original collections and whether or not designation of a lectotype or neotype is necessary.

The Sessé and Moçiño herbarium is housed at Madrid (MA) with duplicates in several other herbaria. Sessé and Moçiño had a large set of colored plates drawn from living specimens in Mexico and Puerto Rico, the majority of which are now at the Hunt Institute for Botanical Documentation (HU). They were copied while on loan to A. P. de Candolle, and sets of these outlines or "calques" were distributed to at least 12 herbaria, including G-DC. For further information, see *Taxonomic Literature* (TL-2) by Stafleu and Cowan (5: 525–528. 1985). I have not seen type material for most names published by Sessé and Moçiño, and the published diagnoses are usually too brief to permit accurate identification of the species. Consequently the status of many Sessé and Moçiño names must remain uncertain pending study of the type material and original illustrations, which is beyond the scope of this work. Types of the taxa described by A. P. de Candolle based on Haenke collections are deposited at PR rather than at G-DC (see Stafleu & Cowan, 1976: 438).

All cited locality data have been taken directly from the labels of the type specimens. In cases where the type—or a photo or microfiche of it—was not seen, locality information was taken directly from the

protologue. Lectotypes are designated herein for the first time for non-lectotypified names in cases where the syntypes have been seen.

Microfiches, mostly of type specimens in the de Candolle herbarium (G-DC), are cited in one of two ways. The microfiche number is equivalent to the volume, page number, and species number based on their enumeration in volume 4 of de Candolle's *Prodromus* containing the Rubiaceae treatment (1830). For example, the type of *Coutarea mexicana* is *Martius s.n.* (Holotype G-DC), and the microfiche citation is 4: 350.3. Alternatively, the IDC (Inter Documentation Company AF) series is used. Here the G-DC herbarium is item number 800 and each fiche has an index number. For example, the type of *Coutarea mexicana* is located on fiche number 680, in the second row, the seventh from the left, so the resulting IDC number is 800.680.II.7.

Herbarium acronyms are abbreviated following *Index Herbariorum* (Holmgren et al., 1990). Abbreviations for authors of botanical names follow Brummitt and Powell (1992). Serial publications have been abbreviated following *Botanico-Periodicum-Huntianum* (Lawrence et al., 1968) and *Botanico-Periodicum-Huntianum/Supplementum* (Bridson & Smith, 1991). Book titles and other non-periodical abbreviations follow *Taxonomic Literature* (TL-2) by Stafleu and Cowan (1976–1988). Other abbreviations frequently used herein are: ft. (feet); m (meters); Distr. (Distrito or District); Mun. (Municipio or Municipality); names of months are always abbreviated by the first three letters in English (i.e., Jan for January).

Taxonomic concepts utilized in this work generally follow those presented in the most recently published monographs, revisions, and floristic treatments available. The nomenclature for the tribe Spermacoceae (including the genera *Crusea, Diodia, Ernodia, Galianthe, Mitracarpus, Richardia, Spermacoce, Staelia*, and *Tobagoa*) follows the annotations and advice of C. Dennis Adams (BM), who is preparing the treatment for *Flora Mesoamericana*. Much of this information is summarized in the extremely useful checklist of neotropical Rubiaceae published by Andersson (1992). In other cases, however, my own taxonomic judgments are presented. Any comments, corrections, and additions from readers will be greatly appreciated.

FORMAT

At the beginning of each generic listing the name of each genus and its type species are always written in normal Roman type. Typifications for these generic names mostly follow *Index Nominum Genericorum (Plantarum)* (Farr et al., 1979).

For each entry, an infrageneric name written in **boldface** type is accepted as valid, whereas an *italicized* name is considered to be a synonym of the name in **boldface** type preceded by an em dash (—) at the end of each entry. Each name is cross-referenced with its basionym, which is also italicized. Blocking names have been indicated in cases where generic transfers have necessitated new names. Other generic combinations (homotypic synonyms) that appear in this catalog are indicated by the generic name(s) listed in italics just preceding the accepted name in boldface at the end of each citation. The following examples illustrate these points.

(1) The accepted name (**boldface** type) is followed by the author(s) and publication citation, the basionym (*italics*), its publication citation, and type information; this is followed by generic names (also in *italics*) under which other combinations (=homotypic synonyms) are listed in this catalog:

Elaeagia myriantha (Standl.) C. M. Taylor & Hammel, Novon 3: 490. 1993. *Sickingia myriantha* Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Type: COLOMBIA: Magdalena, Las Nubes road, region of Santa Marta, 1200 m, 3 Dec 1898, *H. H. Smith 1810* (Holotype F 138660; isotypes MO, NY, n.v., US, n.v., W, n.v., Y, n.v.). *Holtonia, Simira*.

(2) A homotypic synonym (*italics*) is followed by its publication citation, the basionym (*italics*) and its publication citation and type information, and another genus under which a homotypic synonym exists (*italics*). Finally, this is cross-referenced to the accepted name (**boldface**):

Holtonia myriantha (Standl.) Standl., Trop. Woods 30: 37. 1932. *Sickingia myriantha* Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Type: COLOMBIA: Magdalena, Las Nubes road, region of Santa Marta, 1200 m, 3 Dec 1898, *H. H. Smith 1810* (Holotype F 138660; isotypes MO, NY, n.v., US, n.v., W, n.v., Y, n.v.). *Simira*.—**Elaeagia myriantha** (Standl.) C. M. Taylor & Hammel

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Aeginetia multiflora Cav., Anal. Ci. Nat. 3: 131, *t. 28, fig. 2.* 1801; Icon. 6: 52, *t. 572, fig. 2.* 1801. Type: MEXICO: Querétaro, *Née s.n.* (Holotype MA, n.v. (photo MO)). —**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

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Alseis blackiana Hemsl., Diag. Pl. Mex. 30. 1879. Type: PANAMA: In dense woods, Manma [?] Station, P. R. R., Jun 1862, *S.*

Hayes 665 (Holotype K, n.v.; Isotype P (photos MEXU, PTBG)).

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Alseis hondurensis Standl., Trop. Woods 16: 48. 1928. Type: HONDURAS: La Ceiba, Dec 1927, *H. Johansen 9* (Holotype F 572615 (photo PTBG)).

Alseis schippii Lundell, Lloydia 4: 56. 1941. Type: BRITISH HONDURAS (BELIZE): Toledo Distr., Machaca, 50 ft., 4 Nov 1932, *W. A. Schipp 1230* (Holotype TEX-LL (photos MEXU, PTBG); Isotype F (photo PTBG)).—**Alseis hondurensis** Standl.

Alseis yucatanensis Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 50. 1930. Type: MEXICO: Yucatán, without precise locality, 1917–1921, *G. F. Gaumer 24247* (Holotype F 552253 (photo PTBG); Isotype US (photos MEXU, PTBG)).

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Amaioua corymbosa Kunth, Nov. Gen. Sp. 3: 419, *pl. 294*. 1820. Type: VENEZUELA: In locis frondosis Novae-Andalusia prope Cumanacoa, *Humboldt & Bonpland s.n.* (Holotype presumably P-Bonpland, n.v.; Isotype B-W (photo MO)).

Amaioua hirsuta Poepp. & Endl., Nov. Gen. Sp. Pl. 3: 25, *pl. 230* 1841. Type: Chili, Pérou, et Fleuve de La Plata, 1836, *Poeppig 2823* (Holotype W, n.v., fragment F; Isotype F (photo PTBG)).—**Duroia hirsuta** (Poepp. & Endl.) K. Schum.

Amaioua magnicarpa Dwyer, Ann. Missouri Bot. Gard. 67: 29. 1980. Type: PANAMA: Colón, Santa Rita Ridge, 23 Mar 1972, *J. D. Dwyer 9552* (Holotype MO 2162079 (photo PTBG); Isotype MO 4199142 (photo PTBG)).

Amaioua pedicellata Dwyer, Ann. Missouri Bot. Gard. 67: 30. 1980. Type: PANAMA: Veraguas, along road between Escuela Agrícola and Alto Piedra (above Santa Fé) and Río Dos Bocas ca. 5–8 km from Escuela, 730–770 m, 26 Jul 1974, *T. B. Croat 25937* (Holotype MO 2212775 (photo PTBG); Isotypes F (photo PTBG), GH, n.v., MO 2212776 (photo PTBG)).

Amphidaysa Standl., Field Mus. Nat. Hist., Bot. Ser. 11: 180. 1936. Type: Amphidaysa ambigua (Standl.) Standl.

Amphidaysa ambigua (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 11: 181. 1936. *Sabicea ambigua* Standl., Publ. Field. Mus. Nat. Hist., Bot. Ser. 7: 49. 1930. Type: COLOMBIA: Without precise locality, 1847, *Triana s.n.* (Holotype K, n.v. (photo F)).

Amphidaysa spathulata Dwyer, Ann. Missouri Bot. Gard. 67: 33. 1980. Type: PANAMA: Darién, Cerro Campamento, south of Cerro Pire, cloud forest, 20–27 Mar 1968, *J. A. Duke 15615* (Holotype MO 1964213 (photos MEXU, PTBG)).

Anisomeris C. Presl, Symb. Bot. 2: 5, *t. 54*. 1834. Type: Anisomeris spinosa C. Presl. [Herein treated as a synonym of *Chomelia* Jacq.]

Anisomeris brachypoda (Donn. Sm.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 293. 1929. *Chomelia brachypoda* Donn. Sm., Bot. Gaz. (Crawfordsville) 47: 255. 1909. Type: GUATEMALA: Alta Verapaz, Sasis, banks of Río Ogeqaj, 900 m, May 1908, *H. von Tuerckheim 2253* (Holotype US; Isotypes F (photos MEXU, PTBG), US).—**Chomelia brachypoda** Donn. Sm.

Anisomeris englesingii (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 360. 1931. *Chomelia englesingii* Standl., Trop. Woods 16: 45. 1928. Type: NICARAGUA: Region of Braggman's Bluff (Kukalaya River), 200–600 ft., 2 Dec 1927, *F. C. Englesing 49* (Holotype F 572606 (photo PTBG)).—**Chomelia recordii** Jacq.

Anisomeris microloba (Donn. Sm.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 293. 1929. *Chomelia microloba* Donn. Sm., Bot. Gaz. (Crawfordsville) 31: 114. 1901. Type:

COSTA RICA: Forêts de Santo Domingo de Golfo Dulce, Feb 1896, *A. Tonduz 9874* (Holotype US; Isotypes F, MO (photos MEXU, PTBG), P (photo MEXU), US, 3 sheets).—**Chomelia microloba** Donn. Sm.

Anisomeris pringlei (S. Watson) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 293. 1929. *Chomelia pringlei* S. Watson, Proc. Amer. Acad. Sci. 26: 137. 1891. Type: MEXICO: San Luis Potosí, Tamasopo Canyon, 6 Aug 1890, *C. G. Pringle 3209* (Holotype US 48535; Isotypes F (photos MEXU, PTBG), MO (photos MEXU, PTBG), P (photos MEXU, PTBG)).—**Chomelia pringlei** S. Watson

Anisomeris protracta (Bartl. ex DC.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 293. 1920. *Guettarda protracta* Bartl. ex DC., Prodr. 4: 457. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Chomelia protracta** (Bartl. ex DC.) Standl.

Anisomeris purpusii Brandegee, Univ. Calif. Publ. Bot. 6: 70. 1914. Type: MEXICO: Chiapas, near Tonala, Sep 1913, *C. A. Purpus 6940* (Holotype UC 173028, n.v.; Isotypes F (photo PTBG), US (photo PTBG)). *Chomelia*.—**Chomelia spinosa** Jacq.

Anisomeris recordii (Standl.) Standl., N. Amer. Fl. 32: 227. 1934. *Chomelia recordii* Standl., Trop. Woods 7: 9. 1926. Type: GUATEMALA: Izabal, high forest between Los Andes and Entre Ríos, lower Río Motagua Valley, *Record 8862* (Holotype Y, n.v.; Isotype NY, n.v.).—**Chomelia recordii** Standl.

Anisomeris rudis Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 394. 1938. Type: HONDURAS: Comayagua, summit of ridge above El Achote, above the plains of Siguatepeque, 1800 m, 1 Aug 1936, *T. G. Yunker, R. F. Dawson & H. R. Youse 6253* (Holotype F 857678 (photo PTBG); Isotype MO 1115471).—**Chomelia rudis** (Standl.) Lorence

Anisomeris sylvicola (Standl.) Standl., N. Amer. Fl. 32: 225. 1934. *Chomelia ? sylvicola* Standl., J. Wash. Acad. Sci. 18: 182. 1928. Type: COSTA RICA: Heredia, Yerba Buena, northeast of San Isidro, 2000 m, *P. C. Standley & J. Valerio 49196* (Holotype US 1305902).—**Chione sylvicola** (Standl.) W. C. Burger

Anotis DC., Prodr. 4: 431. 1830. Type not designated.

Anotis cervantesii (Kunth) DC., Prodr. 4: 432. 1830. *Hedyotis cervantesii* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 390. 1820. Type: MEXICO: Without precise locality, *A. Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotype B-W (photo MO)).—**Hedyotis cervantesii** Kunth

Anotis longiflora Benth., Pl. Hartw. 23. 1839. Type: MEXICO: Without precise locality, 1837, *T. K. Hartweg 206* (Holotype K, n.v.; Isotype GH, n.v.). *Bouvardia*.—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Antirhea Comm. ex Juss., Gen. Pl. 204. 1789. Type: Antirhea borbonica J. F. Gmelin

Antirhea aromatica Cast.-Campos & Lorence, Ann. Missouri Bot. Gard. 72: 268, *fig. 1*. 1985. Type: MEXICO: Veracruz, Mun. Jalcomulco, ca. 10 km al S de Apazapan, Barranca de Monterrey, al S de Cuetzalan, entre Cuetzalan y Apazapan, 350 m, 17 Sep 1983, *G. Castillo-Campos 2957* (Holotype XAL; Isotypes MEXU, MO, XAL, plus about 50 more distributed to a wide range of herbaria).

Antirhea lucida (Sw.) Benth. & Hook. f., Gen. Pl. 2: 100. 1873. *Laugeria lucida* Sw., Prodr. Veg. Ind. Occ. 48. 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (Holotype presumably S, n.v.).—**Stenostomum lucidum** (Sw.) C. F. Gaertn.

Antirhea panamensis Standl., N. Amer. Fl. 32: 264. 1934. Type: PANAMA: San Blas District, 21–28 Apr 1933, *G. P. Cooper 238* (Holotype F 686345 (photo PTBG); Isotype F 709955). *Chomelia*.—**Chomelia microloba** Donn. Sm.

Antirhea trichantha (Griseb.) Hemsl., Biol. Centr.-Amer., Bot. 2: 42. 1881. *Pittoniotis trichantha* Griseb., Bonplandia 6: 8. 1858.

Type: PANAMA: Without precise locality, *Duchaissing s.n.* (Holotype presumably GOET or P, n.v.).—**Pittoniotis trichantha** Griseb.

Appunia Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 120. 1873. Type: Appunia tenuiflora (Benth.) Hook. f.

Appunia guatemalensis Donn. Sm., Bot. Gaz. (Crawfordsville) 48: 294. 1909. Type: GUATEMALA: Izabal, silva prope pagam martimam Livingston, Jun 1906, *H. von Tuerckheim III-230* (Holotype US 943501 (photos MEXU, PTBG)). *Morinda*.

Appunia parviflora Lundell, Contr. Univ. Michigan Herb. 4: 28. 1940. Type: BRITISH HONDURAS (BELIZE): Stann Creek Distr., Silk Grass Creek Reserve, 5 Sep 1939, *P. H. Gentle 2986* (Holotype MICH, n.v.; Isotypes A, n.v., F (photo PTBG), US (photos MEXU, PTBG)).—**Psychotria erecta** (Aubl.) Standl. & Steyerm.

Appunia seibertii Standl., Ann. Missouri Bot. Gard. 24: 208. 1937. Type: PANAMA: Panamá, vicinity of Arenoso, lower Río Trinidad, 26–50 m, 7–10 Aug 1935, *R. J. Seibert 624* (Holotype MO 1110146 (photos MEXU, PTBG); Isotypes A, n.v., F).

Arachnothryx Planch., Fl. Serres 5: *tab. 442*. 1849. Type: Arachnothryx leucophylla (Kunth) Planch. Type designated by Borhidi, 1982. [Herein treated as a synonym of *Rondeletia* L.]

Arachnothryx acuminata (Oerst. ex Standl.) Borhidi, Acta Bot. Hung. 35: 310. 1989 [as *acumunata*]. *Sommera acuminata* Oerst. ex Standl., J. Wash. Acad. Sci. 17: 340. 1927. Type: MEXICO: Oaxaca, Amatlán, *F. Liebmann 11712* (Holotype C (photo MEXU); Isotype US (photos MEXU, PTBG)). *Rondeletia*.—**Rondeletia scabra** Hemsl.

Arachnothryx aetheocalymna (Donn. Sm.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia aetheocalymna* Donn. Sm., Bot. Gaz. (Crawfordsville) 42: 298. 1906. Type: GUATEMALA: Alta Verapaz, trail between Sepacuité and Secanquím, 550–1000 m, 14 Jan 1905, *W. R. Maxon & R. Hay 3275* (Holotype US 473244 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Rondeletia aetheocalymna** Donn. Sm.

Arachnothryx albida (Lundell) Borhidi, Acta Bot. Hung. 35: 309. 1989. *Rondeletia albida* Lundell, Wrightia 5: 323. 1976. Type: MEXICO: Chiapas, Carelas, near Motozintla, 2176 m, Apr 1945, *E. Matuda 5509* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MEXU, TEX-LL).—**Rondeletia laniflora** Benth.

Arachnothryx aspera (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 68. 1982. *Rondeletia aspera* Standl., N. Amer. Fl. 32: 54. 1918. Type: COSTA RICA: San José, Pont du Rodeo, Pacacol (Villa Colón), Jan 1891, *H. Pittier 3243* (Holotype US 941408 (photo PTBG)).—**Rondeletia aspera** Standl.

Arachnothryx belizensis (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia belizensis* Standl., Carnegie Inst. Wash. Publ. 461: 91. 1935. Type: BRITISH HONDURAS (BELIZE): Jasinto Hills, 300 ft., 28 Aug 1933, *W. A. Schipp 1201* (Holotype F 683600 (photos MEXU, PTBG); Isotypes GH, n.v., K (photo PTBG), MO).—**Rondeletia belizensis** Standl.

Arachnothryx belizensis (Standl.) Borhidi var. *longiloba* (Lundell) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia belizensis* Standl. var. *longiloba* Lundell, Wrightia 5: 323. 1976. Type: GUATEMALA: Alta Verapaz, Rubelsanto, 2.3 km ESE of Balastrera, 20 Jul 1985, *C. L. Lundell & E. Contreras 19545* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MO (photo PTBG)).—**Rondeletia belizensis** Standl.

Arachnothryx bertieroides (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia bertieroides* Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 267. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp, Chiriquí Trail, 900 m, 1928, *G. P. Cooper 598* (Yale 12231) (Holotype F 579614 (photo PTBG); Isotype NY, n.v.).—**Rondeletia bertieroides** Standl.

Arachnothryx bourgaei (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia bourgaei* Standl., N. Amer. Fl. 32: 56. 1918. Type: MEXICO: Veracruz, region de Orizaba, Monte San Cristóbal, 8 Jul 1866, *E. Bourgeau 2618* (Holotype US 49964 (photos MEXU, PTBG); Isotypes P, 4 sheets (photos MEXU, PTBG)).—**Rondeletia laniflora** Benth.

Arachnothryx brenesii (Standl.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia brenesii* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1370. 1938. Type: COSTA RICA: Camino de San Ramón a La Calera, 20 Mar 1929, *A. M. Brenes 6757* (Holotype F 854972 (photo PTBG)).—**Rondeletia brenesii** Standl.

Arachnothryx brevicorolla (J. H. Kirkbr.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982 [as *brevicollis*]. *Rondeletia salicifolia* Dwyer & Hayden subsp. *brevicorolla* J. H. Kirkbr., Ann. Missouri Bot. Gard. 55: 383. 1963. Type: PANAMA: Bocas del Toro, cloud forest above Quebrada Huron on Cerro Bonyik, 166–400 m, 13 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 597* (Holotype MO 1946832 (photo PTBG); Isotypes NY, n.v., US (photos MEXU, PTBG)).—**Rondeletia bertieroides** Standl.

Arachnothryx buddleioides (Benth.) Planch., Fl. Serres 5: *tab. 442*. 1849. *Rondeletia buddleioides* Benth., Pl. Hartweg. 69. 1840. Type: MEXICO: Oaxaca, in planitie Llano Verde, *T. K. Hartweg 502* (Holotype K (photo PTBG); Isotypes NY, n.v. (fragment US (photos MEXU, PTBG), P (photos MEXU, PTBG)).—**Rondeletia buddleioides** Benth.

Arachnothryx buddleioides (Benth.) Planch. var. *aspera* (J. H. Kirkbr.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia buddleioides* Benth. var. *aspera* J. H. Kirkbr., Ann. Missouri Bot. Gard. 55: 379. 1969. Type: PANAMA: Bocas del Toro, between Criollo (just above Buena Vista) and Quebrada Higueron on Chiriqui Trail, 18 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 780* (Holotype MO 1942973 (photos MEXU, PTBG)).—**Rondeletia buddleioides** Benth.

Arachnothryx calycosa (Donn. Sm.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia calycosa* Donn. Sm., Bot. Gaz. (Crawfordsville) 56: 59. 1913. Type: COSTA RICA: Forêts de la Palma, 1460 m, 25 Sep 1898, *A. Tonduz 11633* (Holotype US 941406 (photos F, MEXU, PTBG)).—**Rondeletia calycosa** Donn. Sm.

Arachnothryx capitellata (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia capitellata* Hemsl., Diag. Pl. Mex. 28. 1879. Type: MEXICO: Without precise locality, *Jurgensen 355* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL (n.v., fragment F), K (photo PTBG)). Syntypes: MEXICO: Oaxaca, Joya, *F. Liebmann 202* (K (photo PTBG); without precise locality, *Jurgensen 376* (K (photo PTBG)).—**Rondeletia capitellata** Hemsl.

Arachnothryx chinajensis (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia chinajensis* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 254. 1947. Type: GUATEMALA: Alta Verapaz, Cerro Chinajá, between Finca Yalpemech and Chinajá, above source of Río San Diego, 150–700 m, 1–2 Apr 1942, *J. A. Steyermark 45637* (Holotype F 1134210 (photos MEXU, PTBG)).—**Rondeletia chinajensis** Standl. & Steyerm.

Arachnothryx cooperi (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia cooperi* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 4: 267. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp, on Chiriquí Trail, 1250 ft., Jan–Mar 1928, *G. P. Cooper 600* (Yale 12233) (Holotype F 579596 (photo PTBG); Isotype NY, n.v.).—**Rondeletia cooperi** Standl.

Arachnothryx cordovana (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia cordovana* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 26. 1943. Type: GUATEMALA: Zacapa, in ravine bordering Quebrada Alejandria, summit of Sierra de las Minas, vicinity of Finca Alejandria, 2500 m, 13 Oct 1939, *J. A. Steyermark 29906* (Holotype F 1042952

(photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Rondeletia brandegeeana** Lorence

Arachnothryx costaricensis (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia costaricensis* Standl., N. Amer. Fl. 32: 61. 1918. Type: COSTA RICA: Buena Vista, San Carlos, 900 m, Apr 1903, *H. Pittier 16696* (Holotype US 764141 (photos MEXU, PTBG)).—**Rondeletia costaricensis** Standl.

Arachnothryx darcyi (Dwyer) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia darcyi* Dwyer, Ann. Missouri Bot. Gard. 67: 467. 1980. Type: PANAMA: Colón, road bank just W of Portobelo, 12 Apr 1970, *W. G. D'Arcy 4079* (Holotype MO 2238438 (photo PTBG); Isotype MO (photo PTBG)). —**Rondeletia secunda** Standl.

Arachnothryx dariensis (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 68. 1982. *Rondeletia dariensis* Standl., N. Amer. Fl. 32: 53. 1918. Type: PANAMA: Darién, Boca de Paurandó, on Sambú River, southern Darién, 20 m, Feb 1912, *H. Pittier 5684* (Holotype US 867136 (photos MEXU, PTBG); Isotype F (photo PTBG)).—**Rondeletia dariensis** Standl.

Arachnothryx deamii (Donn. Sm.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 68. 1982. *Bouvardia deamii* Donn. Sm., Bot. Gaz. (Crawfordsville) 49: 455. 1910. Type: GUATEMALA: At base of Rillo de las Nabajas, about ¾ mile front side of Fiscal, 3700 ft., 5 Jun 1909, *C. C. Deam 6190* (Holotype US 579579 (photos MEXU, PTBG); Isotypes A, n.v., F (photo PTBG), GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Rondeletia deamii** (Donn. Sm.) Standl.

Arachnothryx edwardsii (Standl.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia edwardsii* Standl., Trop. Woods 37: 31. 1934. Type: HONDURAS: Comayagua, Pito Solo, Lake Yojoa, 2000 ft., 29 Aug 1932, *J. B. Edwards P476* (Holotype F 662645 (photos MEXU, PTBG); Isotype A, n.v.). —**Rondeletia edwardsii** Standl.

Arachnothryx elongata (Bartl. ex DC.) Planch., Fl. Serres 5: *tab. 442*. 1849. *Rondeletia elongata* Bartl. ex DC., Prodr. 4: 409. 1830. Type: MEXICO: Guerrero, *Haenke s.n.* (Holotype presumably PR, n.v.; Isotype W, n.v. (photo MO)).—**Rondeletia leucophylla** Kunth

Arachnothryx falciformis (Lundell) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia falciformis* Lundell, Wrightia 5: 324. 1976. Type: MEXICO: Hidalgo, km 332 of Mexico City-Laredo highway, above Chapulhuacan, 3800 ft., 13 Jul 1943, *C. L. Lundell 12234* (Holotype TEX-LL (photos MEXU, PTBG); Isotype F (photo PTBG)).—**Rondeletia heteranthera** Brandegee

Arachnothryx galeottii (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia galeottii* Standl., N. Amer. Fl. 32: 59. 1918. Type: MEXICO: Without precise locality, *H. Galeotti s.n.* (Holotype US 454830 (photos MEXU, PTBG)). —**Rondeletia galeottii** Standl.

Arachnothryx gonzaleoides (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987 [as *gonzalaeoides*]. *Rondeletia gonzaleoides* Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 160. 1930. Type: MEXICO: Chiapas, Pueblo Nuevo, 2200 m, 1840, *J. Linden 149* (Holotype LE, n.v. (fragment F, photos MEXU, PTBG); probable Isotype P (photos MEXU, PTBG)).—**Rondeletia gonzaleoides** Standl.

Arachnothryx gracilis (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia gracilis* Hemsl., Diag. Pl. Nov. Mexic. 53. 1880. Type: GUATEMALA: Alta Verapaz, 3600 ft., *H. von Tuerckheim 404* (Holotype K (photo PTBG)).—**Rondeletia gracilis** Hemsl.

Arachnothryx gracilispica (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia gracilispica* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 342. 1931. Type: MEXICO: Oaxaca, Sierra San Pedro Nolasco, Talea, etc., 1843–33, *C. Jurgensen 935* (Holotype K (photo PTBG; fragment F, photos MEXU, PTBG)).—**Rondeletia gracilispica** Standl.

Arachnothryx hameliifolia (Dwyer & Hayden) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia hameliifolia* Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 144. 1967. Type: PANAMA: Veraguas, Santiago, Aug 1961, *J. D. Dwyer 1350* (Holotype MO 1824657 (photo PTBG); Isotype NY, n.v.). —**Rondeletia hameliifolia** Dwyer & Hayden

Arachnothryx heteranthera (Brandegee) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia heteranthera* Brandegee, Univ. Calif. Publ. Bot. 4: 387. 1913. Type: MEXICO: Veracruz, Baños del Carrizal, Aug 1912, *C. A. Purpus 6148* (Holotype UC 155217, n.v.; Isotypes F, MO).—**Rondeletia heteranthera** Brandegee

Arachnothryx izabalensis (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia izabalensis* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 286. 1940. Type: GUATEMALA: Izabal, Escoba, across the bay (west) from Puerto Barrios, near sea level, 3 May 1939, *P. C. Standley 72891* (Holotype F 991611 (photos MEXU, PTBG)).—**Rondeletia izabalensis** Standl. & Steyerm.

Arachnothryx jurgensenii (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia jurgensenii* Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: MEXICO: Oaxaca, Sierra de San Pedro Nolasco, *Jurgensen 248* (Holotype K (photo PTBG)).—**Rondeletia jurgensenii** Hemsl.

Arachnothryx kirkbridei (Dwyer) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia kirkbridei* Dwyer, Ann. Missouri Bot. Gard. 67: 469. 1980. Type: PANAMA: Veraguas, 16 km NW of Santa Fé on road to Calovébora (Panama Hwy. 35), 300–500 m, 16 May 1975, *S. Mori & J. Kallunki 6112* (Holotype MO 2300094 (photo PTBG)). —**Rondeletia bertieroides** Standl.

Arachnothryx laniflora (Benth.) Planch., Fl. Serres 5: *tab. 442*. 1849. *Rondeletia laniflora* Benth., Pl. Hartw. 85. 1841. Type: GUATEMALA: In montibus las Nubes, *T. Hartweg 584* (Holotype K (photo PTBG), fragment US (photos MEXU, PTBG); Isotypes B (presumably destroyed, photo MO), P (photos MEXU, PTBG)). —**Rondeletia laniflora** Benth.

Arachnothryx leptodictya (B. L. Rob.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 68. 1982. *Rondeletia leptodictya* B. L. Rob., Proc. Amer. Acad. Sci. 45: 402. 1910. Type: MEXICO: [Boundary between Michoacán and Guerrero] Rives du Río Petatlán, 500 m, 24 Nov 1898, *E. Langlassé 666* (Holotype GH, n.v.; Isotypes F (photos MEXU, PTBG), G, n.v., P (2 sheets, photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Rondeletia leucophylla** Kunth

Arachnothryx leucophylla (Kunth) Planch., Fl. Serres 5: *tab. 442*. 1849. *Rondeletia leucophylla* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 395. *t. 290*. 1820. Type: MEXICO: Inter Alto del Peregrino et Flumen Papagallo, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotypes B, n.v., P (photos MEXU, PTBG)).—**Rondeletia leucophylla** Kunth

Arachnothryx liebmannii (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia liebmannii* Standl., J. Wash. Acad. Sci. 17: 336. 1927. Type: MEXICO: Oaxaca, without precise locality, 1841–43, *F. Liebmann 11834* (Holotype US 1315231 (photos MEXU, PTBG); probable Isotype P (photos MEXU, PTBG)).—**Rondeletia capitellata** Hemsl.

Arachnothryx linguiformis (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia linguiformis* Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: GUATEMALA: Without precise locality, *Skinner s.n.* (Holotype K (photo PTBG)).—**Rondeletia linguiformis** Hemsl.

Arachnothryx longipetiolata (Lundell) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia longipetolata* Lundell, Wrightia 5: 325. 1976. Type: MEXICO: Chiapas, Mt. Ovando, near Escuintla, 14 Nov 1945, *E. Matuda 6146* (Holotype TEX-LL; Isotypes MEXU, TEX-LL).—**Rondeletia buddleioides** Benth.

Arachnothryx lundelliana (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia lundelliana* Standl., Contr. Univ. Mich. Herb.

4: 31. 1940. Type: BRITISH HONDURAS (BELIZE): El Cayo Distr., Vaca, 21 Apr 1938, *P. H. Gentle 2504* (Holotype F 941520 (photos MEXU, PTBG); Isotypes A, n.v., TEX-LL ex MICH (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Rondeletia stenosiphon** Hemsl.

Arachnothryx macrocalyx (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia macrocalyx* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 254. 1947. Type: GUATEMALA: Izabal, Cerro San Gil, 300–900 m, 25 Dec 1941, *J. A. Steyermark 41864* (Holotype F 1134224 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).—**Rondeletia macrocalyx** Standl. & Steyerm.

Arachnothryx mexiae (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia mexiae* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 55. 1940. Type: MEXICO: Oaxaca, Distr. Choapan, Santa María, Montaña Santa María, 1500 m, 1 Apr 1938, *Y. Mexia 9261* (Holotype F 982856 (photos MEXU, PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)). —**Rondeletia scabra** Hemsl.

Arachnothryx minor (Lundell) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia minor* Lundell, Wrightia 5: 326. 1976. Type: MEXICO: Veracruz, about 10 miles north of Teziutlán, 6 Jan 1964, *D. S. Correll & H. B. Correll 28736* (Holotype TEX-LL (photos MEXU, PTBG); Isotype MEXU). —**Rondeletia gracilispica** Standl.

Arachnothryx myriantha (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia myriantha* Standl. & Styerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 288. 1940. Type: GUATEMALA: Suchitepéquez, Finca Moca, 3200 ft., 31 Oct 1934, *A. F. Skutch 1569* (Holotype F 813463 (photos MEXU, PTBG); Isotypes A, n.v., US (photos MEXU, PTBG)).—**Rondeletia myriantha** Standl. & Steyerm.

Arachnothryx myriantha (Standl. & Steyerm.) Borhidi var. *armentalis* (L.O. Williams) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia myriantha* Standl. & Steyerm. var. *armentalis* L. O. Williams, Phytologia 26: 127. 1973. Type: GUATEMALA: Quiché, Nebaj, 5600 ft., 22 Nov 1934, *A. F. Skutch 1776* (Holotype F 815811 (photos MEXU, PTBG)).—**Rondeletia myriantha** Standl. & Steyerm. var. **armentalis** L. O. Williams

Arachnothryx nebulosa (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia nebulosa* Standl., Trop. Woods 37: 32. 1934. Type: HONDURAS: Tegucigalpa, La Aurora Trail, Rosario, San Juancito, 5400 ft., 2 Apr 1932, *J. B. Edwards P10* (Holotype F 662646 (photos MEXU, PTBG); Isotype A, n.v.). —**Rondeletia nebulosa** Standl.

Arachnothryx nicaraguensis (Oerst.) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia nicaraguensis* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 43. 1853. Type: NICARAGUA: Matagalpa, Segovia, in monte Pantasmo, Jan 1848, *Oersted s.n.* (Holotype C (photos F, MO, US), fragment US).—**Rondeletia nicaraguensis** Oerst.

Arachnothryx nitida (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia nitida* Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: MEXICO: Chiapas, Fl. rosatres, forêts des pins, Chiapas, in fevr., *Linden 1660* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL, n.v., fragment F, P (photos MEXU, PTBG)). Syntype: MEXICO: Chiapas, *Ghiesbreght 728* (K (photo PTBG), GH, n.v.). *Linden 1660* was designated as lectotype, as it is the better specimen with more duplicates.—**Rondeletia nitida** Hemsl.

Arachnothryx oaxacana (Standl.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia oaxacana* Standl., Field Mus. Nat. Hist., Bot. Ser. 11: 255. 1936. Nomen superfl., based on same type as *Rondeletia mexicana* (Turcz.) Standl. Type: MEXICO: Oaxaca, without precise locality, 3000 ft., *H. Galeotti 2664* (Holotype P (photos MEXU, PTBG), fragment F (photos MEXU, PTBG)). —**Rondeletia mexicana** (Turcz.) Standl.

Arachnothryx ovandensis (Lundell) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia*

ovandensis Lundell, Wrightia 5: 326. 1976. Type: MEXICO: Chiapas, Mt. Ovando, near Escuintla, 24 Oct 1941, *E. Matuda 6067* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F (photo PTBG), MEXU, TEX-LL).—**Rondeletia ovandensis** Lundell

Arachnothryx pansamalana (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia pansamalana* Standl., N. Amer. Fl. 32: 58. 1918. Type: GUATEMALA: Alta Verapaz, Pansamalá, 3800 ft., Apr 1886, *H. von Tuerckheim 897* (Holotype US 49985 (photos MEXU, PTBG); Isotype GH, n.v.).—**Rondeletia pansamalana** Standl.

Arachnothryx phyllocephala (Standl. & L. O. Williams) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia phyllocephala* Standl. & L. O. Williams, Ceiba 3: 63. 1952. Type: HONDURAS: Cortés, faldas húmedas de Montaña Sta. Ana, matorrales húmedos de Río Sta. Ana, 210 m, 6 Dec 1950, *A. Molina R. 3608* (Holotype US 2216049 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).—**Rondeletia thiemei** Donn. Sm.

Arachnothryx platysepala (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia platysepala* Standl., Ann. Missouri Bot. Gard. 27: 343. 1940. Type: PANAMA: Coclé, El Valle, North Rim, 600–1000 m, 14 May 1939, *P. H. Allen 1791* (Holotype F 989484 (photo PTBG); Isotypes F (photos MEXU, PTBG), G (n.v.), GH, n.v., MO (photos MEXU, PTBG), NY, n.v.).—**Rondeletia bertieroides** Standl.

Arachnothryx polycephala (Standl.) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia polycephala* Standl., J. Wash. Acad. Sci. 17: 337. 1927. Type: MEXICO: Oaxaca, without precise locality, *F. Liebmann 11826* (Holotype C, fragment US (photos MEXU, PTBG)).—**Rondeletia mexicana** (Turcz.) Standl.

Arachnothryx pyramidalis (Lundell) Borhidi, Acta Bot. Hung. 35: 310. 1989. *Rondeletia pyramidalis* Lundell, Wrightia 5: 327. 1976. Type: MEXICO: Chiapas, San Luis, near Siltepec, 1300 m, 24 Jan 1945, *E. Matuda 5292* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MEXU, TEX-LL).—**Rondeletia pyramidalis** Lundell

Arachnothryx rekoi (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia rekoi* Standl., Proc. Biol. Soc. Wash. 8: 126. 1918. Type: MEXICO: Oaxaca, Las Pilas (Cerro Espino), 400 m, 10 Oct 1917, *B. P. Reko 3490* (Holotype US 867145 (photos MEXU, PTBG)).—**Rondeletia rekoi** Standl.

Arachnothryx rubens (L. O. Williams) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia rubens* L. O. Williams, Phytologia 26: 128. 1973. Type: GUATEMALA: Quiché, Nebaj, 6000 ft., 19 Nov 1934, *A. F. Skutch 1725* (Holotype F 815804 (photos MEXU, PTBG)).—**Rondeletia rubens** L. O. Williams

Arachnothryx rufescens (B. L. Rob.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia rufescens* B. L. Rob., Proc. Amer. Acad. Arts 45: 402. 1910. Type: GUATEMALA: Alta Verapaz, Cobán, 4800 ft., Mar 1881, *H. von Tuerckheim 582* (Holotype GH, n.v.; Isotypes P (photos MEXU, PTBG), US, 2 sheets (photos MEXU, PTBG)).—**Rondeletia gracilis** Hemsl.

Arachnothryx salicifolia (Dwyer & Hayden) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia salicifolia* Dwyer & Hayden, Phytologia 15: 58. 1967. Type: PANAMA: Panamá, Cerro Jefe in "Clusia forest" at 2700–3000 ft., 27 Jan 1966, *E. L. Tyson, J. D. Dwyer & K. Blum 3319* (Holotype MO 1824503 (photo PTBG); Isotypes F, US (photos MEXU, MO)).—**Rondeletia bertieroides** Standl.

Arachnothryx secunda (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 70. 1982. *Rondeletia secunda* Standl., Contr. U.S. Natl. Herb. 18: 141. 1916. Type: PANAMA: San Blas, forests around Puerto Obaldía, San Blas coast, 0–50 m, Aug 1911, *H. Pittier 4279* (Holotype US 679392 (photos MEXU, PTBG); Isotype NY, n.v.).—**Rondeletia secunda** Standl.

Arachnothryx secundiflora (B. L. Rob.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia secundiflora* B. L. Rob., Proc. Amer. Acad. Arts 45: 403. 1910. Type:

GUATEMALA: Along road from Patín to Escuintla, 1860, *S. Hayes s.n.* (Holotype GH, n.v.).—**Rondeletia secundiflora** B. L. Rob.

Arachnothryx septicidalis (B. L. Rob.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia septicidalis* B. L. Rob., Proc. Amer. Acad. Arts 45: 403. 1910. Type: MEXICO: Chiapas, Chicharras, 3000–6000 ft., 6 Feb 1896, *E. W. Nelson 3755* (Holotype US 256722 (photos MEXU, PTBG); Isotype GH, n.v.).—**Rondeletia septicidalis** B. L. Rob.

Arachnothryx silvicola (L. O. Williams) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia silvicola* L. O. Williams, Phytologia 26: 128. 1973. Type: HONDURAS: Atlántida, Lancetilla Valley, near Tela, 20–600 m, 6 Dec 1927–20 Mar 1928, *P. C. Standley 56885* (Holotype F 581955 (photos MEXU, PTBG)). —**Rondeletia silvicola** L. O. Williams

Arachnothryx skutchii (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia skutchii* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 289. 1940. Type: GUATEMALA: Suchitepéquez, Finca Moca, 4200 ft., 10 Jan 1935, *A. F. Skutch 2110* (Holotype F 934088 (photos MEXU, PTBG); Isotypes A, n.v., US (photos MEXU, PTBG)).—**Rondeletia skutchii** Standl. & Steyerm.

Arachnothryx stachyoidea (Donn. Sm.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia stachyoidea* Donn. Sm., Bot. Gaz. (Crawfordsville) 42: 298. 1906. Type: GUATEMALA: Alta Verapaz, Semococh, 600–900 m, 25 Apr 1905, *R. S. Hay s.n.* (Holotype US 473726 (photos MEXU, PTBG)).—**Rondeletia stachyoidea** Donn. Sm.

Arachnothryx standleyana (A. R. Molina) Borhidi, Acta Bot. Hung. 33: 302. 1987. *Rondeletia standleyana* A. R. Molina, Ceiba 1: 262. 1951. Type: HONDURAS: Morazán, in pine forest above Zambrano, 1200 m, 20 Jul 1949, *L. O. Williams & A. Molina R. 14417* (Holotype US 2216018 ex EAP (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).—**Rondeletia standleyana** A. R. Molina

Arachnothryx stenostachya (Standl.) Borhidi, Acta Bot. Hung. 33: 303. 1987. *Rondeletia stenostachya* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1372. 1938. Type: COSTA RICA: La Hondura de San José, 1300 m, 15 Aug 1933, *M. Valerio 769* (Holotype F 681816 (photos MEXU, PTBG)). —**Gonzalagunia brenesii** Standl.

Arachnothryx tacanensis (Lundell) Borhidi, Acta Bot. Hung. 33: 303. 1987. *Rondeletia tacanensis* Lundell, Bull. Torrey Bot. Club 66: 603. 1939. Type: MEXICO: Chiapas, Volcán Tacaná West, 2800 m, 30 Mar 1939, *E. Matuda 2928* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes A, n.v., F (photos MEXU, PTBG), GH, n.v., MEXU, US (photos MEXU, PTBG)).—**Rondeletia tacanensis** Lundell

Arachnothryx thiemei (Donn. Sm.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia thiemei* Donn. Sm., Bot. Gaz. (Crawfordsville) 42: 299. 1906. Type: HONDURAS: Santa Bárbara, Río Chamelcón, 400 m, 16 Dec 1888, *C. Thieme 5276* (Holotype US 941403 (photos MEXU, PTBG)).—**Rondeletia thiemei** Donn. Sm.

Arachnothryx torresii (Standl.) Borhidi, Acta Bot. Hung. 33: 303. 1987. *Rondeletia torresii* Standl., J. Wash. Acad. Sci. 18: 163. 1928. Type: COSTA RICA: Alajuela, Viento Fresco, 1600–1900 m, 13 Feb 1926, *P. C. Standley & R. Torres R. 47839* (Holotype US 1305295 (photos MEXU, PTBG)). —**Rondeletia torresii** Standl.

Arachnothryx tuxtlensis (Lorence & Cast.-Campos) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia tuxtlensis* Lorence & Cast.-Campos, Biotica 13: 148, *fig. 1*. 1988. Type: MEXICO: Veracruz, Mun. Mecayapan, Volcán San Martín Pajapan al sur del Ejido La Valentina, 700 m, 8 May 1985, *J. I. Calzada 11183* (Holotype XAL; Isotypes F, MEXU, MO (photo PTBG)).—**Rondeletia tuxtlensis** Lorence & Cast.-Campos

Arachnothryx uxpanapensis (Lorence & Cast.-Campos) Borhidi, Acta Bot. Hung. 35: 311.

1989. *Rondeletia uxpanapensis* Lorence & Cast.-Campos, Biotica 13: 150, *fig. 2*. 1988. Type: MEXICO: Veracruz, Mun. Hidalgotitlán, zona de Uxpanapa, Río Solosuchil a 5–6 km al ESE de Hermanos Cedillo, 100–200 m, 24 Mar 1982, *D. Lorence et al. 3909* (Holotype MEXU (photo PTBG); Isotypes BM, CHAPA, ENCB, MO, NY, PTBG, UC, XAL).—**Rondeletia uxpanapensis** Lorence & Cast.-Campos

Arachnothryx villosa (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 69. 1982. *Rondeletia villosa* Hemsl., Diag. Pl. Nov. Mexic. 27. 1879. Type: MEXICO: Oaxaca, San Pedro Nolasco, etc., *Jurgensen 806* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL, n.v. (fragment F), K (photo PTBG), P (photos MEXU, PTBG)). Syntypes: MEXICO: Oaxaca, Trapiche de Concepción, *F. Liebmann 70* (K (photo PTBG); G-DEL, n.v., fragment F); Tabasco, *Linden 145* (K (photo PTBG); probably G-DEL, n.v., fragment F, P (photos MEXU, PTBG)). *Jurgensen 806* was designated lectotype, as it is the more complete specimen with three duplicates.—**Rondeletia villosa** Hemsl.

Arachnothryx vulcanicola (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 303. 1987. *Rondeletia vulcanicola* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 291. 1940. Type: GUATEMALA: Quezaltenango, Finca Pireneos, lower south-facing slopes of Volcán Santa María de Jesús and Calahuaché, 1300–1500 m, 31 Dec 1939, *J. A. Steyermark 33220* (Holotype F 1041786 (photos MEXU, PTBG)).—**Rondeletia secundiflora** B. L. Rob.

Arachnothryx wendtii (Lorence & Cast.-Campos) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia wendtii* Lorence & Cast.-Campos, Biotica 13: 154, *fig. 3*. 1988. Type: MEXICO: Oaxaca, Distr. Juchitán, Mun. de Sta. María Chimalapa, Arroyo Chocolín, Población de Nicolás Bravo, cerca del Rancho de Augustín Montero, 3–4 km al sur de la Población de Río Alegre (Veracruz), 150 m, 21 Oct 1983, *T. Wendt, A. Montero & I. Almaraz 4244* (Holotype MEXU (photo PTBG); Isotypes CHAPA, PTBG).—**Rondeletia wendtii** Lorence & Cast.-Campos

Arachnothryx yucatanensis (Lundell) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia yucatanensis* Lundell, Wrightia 5: 329. 1976. Type: MEXICO: Yucatán, Chichen Itza, 28 Apr 1950, *J. T. Baldwin, Jr. 14230* (Holotype TEX-LL).—**Rondeletia leucophylla** Kunth

Arachnothryx zolleriana (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 303. 1987. *Rondeletia zolleriana* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 292. 1940. Type: GUATEMALA: San Marcos, between Finca El Porvenir and Loma Corona, 9 mi NW of El Porvenir, southwest-facing slopes of Volcán Tajumulco, 1300–2000 m, 14 Mar 1940, *J. A. Steyermark 37738* (Holotype F 1039668 (photos MEXU, PTBG)).—**Rondeletia brandegeeana** Lorence

Arcytophyllum Willd. ex Schult. & Schult. f. in Roem. & Schult., Syst. Veg. 3: 5. 1827. Type: Arcytophyllum blaerioides Willd. ex Schult. & Schult. f.

Arcytophyllum lavarum K. Schum. ex Standl., Contr. U.S. Natl. Herb. 18: 127. 1916. Type: PANAMA: Chiriquí, Summit of Chiriquí Volcano, 3374 m, 12 Mar 1911, *W. R. Maxon 5349* (Holotype US (photos MEXU, PTBG); Isotype B, presumably destroyed (photo MO)). *Mallostoma lavarum* Donn. Sm., Enum. Pl. Guatem. 5: 36. 1899, nom. nud. (based on *Arcytophyllum lavarum* K. Schum., nom. nud.).

Arcytophyllum muticum (Wedd.) Standl., J. Wash. Acad. Sci. 18: 163. 1928. *Hedyotis mutica* Wedd., Chloris And. 2: 43, *pl. 50*. 1857. Type: COLOMBIA: "Cundinamarca, Prov. Bogota," *Goudot s.n.* (Lectotype P, n.v.; Isolectotype F, n.v.; designated by Mena V., 1986).

Arcytophyllum recurvatum Suess., Bot. Jahrb. Syst. 72: 286. 1942. Type: COSTA RICA: Cartago, "Chirripó Grande, 3450 m," *K. Suessenguth 1313* (Holotype B, presumably

destroyed).—**Arcytophyllum muticum** (Wedd.) Standl.

Arcytophyllum shannonii (Donn. Sm.) Standl., Contr. U.S. Natl. Herb. 18: 128. 1916. *Mallostoma shannonii* Donn. Sm., Bot. Gaz. (Crawfordsville) 18: 203. 1893. Type: GUATEMALA: Chimaltenango, Chicoy, 9000 ft., Mar 1892, *W. C. Shannon s.n.* (Holotype US 48603 (photos MEXU, PTBG); Isotype US 943475).—**Hedyotis serpyllacea** Schltdl.

Asemnantha Hook. f. in Benth. & Hook., Gen. Pl. 2: 106. 1873. Type: Asemnantha pubescens Hook. f.

Asemnantha pubescens Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 106. 1873. Type: MEXICO: Yucatán, Jul, *Linden 1264 bis* (Holotype K, n.v.; Isotypes F (fragment, photo PTBG), P).

Augusta Pohl, Pl. Bras. Icon. Descr. 2: 1. 1828 (sero)–Feb 1829, nom. cons., not Augusta Leandro, 1821. Type: Augusta lanceolata Pohl, typ. cons.

Augusta rivalis (Benth.) J. H. Kirkbr., Brittonia 49: 358. 1997. *Lindenia rivalis* Benth., Pl. Hartweg. 84. 1841. Type: GUATEMALA: In rivis, la Vera Paz, *T. Hartweg 581* (Holotype K, n.v. (photo MO)). *Siphonia.*

Augusta rivalis (Benth.) J. H. Kirkbr. f. *glabra* (S. Darwin) J. H. Kirkbr., Brittonia 49: 358. 1997. *Lindenia rivalis* Benth. f. *glabra* S. P. Darwin, J. Arnold Arbor. 57: 439. 1976. Type: MEXICO: Chiapas, Chicomucelo [as "Chicomuselo"], 800 m, 14 Jul 1941, *E. Matuda 4449* (Holotype US 2087017 (photos MEXU, PTBG); Isotypes A, n.v., F, MO (photos MEXU, PTBG), NY, n.v.).—**Augusta rivalis** (Benth.) J. H. Kirkbr.

Balmea Martínez, Anales Inst. Biol. Univ. Nac. México 13: 37. 1942; Bull. Torrey Bot. Club 69: 438. 1942. Type: Balmea stormae Martínez

Balmea stormae Martínez, Anales Inst. Biol. Univ. Nac. México 13: 37, *figs. 1–4*. 1942; Bull. Torrey Bot. Club 69: 438. 1942. Type: MEXICO: Michoacán, Palo Verde, Pedregales de Jicalán et San Pedro, near Uruápan, 20 (or 21) Sep 1941, *M. Martínez 3400* (Lectotype MEXU; Isolectotypes A, n.v., F, MEXU, US, 3 sheets (photos MEXU, PTBG)); designated by Fosberg, 1974.

Basanacantha Hook. f. in Benth. & Hook., Gen. Pl. 2: 82. 1873. Type: Not designated. [Herein treated as a synonym of *Randia* L.]

Basanacantha altiscandens Ducke, Archiv. Inst. Biol. Veg. Rio Janiero 2: 172. 1935. Type: BRAZIL: Amazonas, *B. Maguire et al. 29469* (Holotype RB 24415, n.v.; Isotype NY, n.v.).—**Randia altiscandens** (Ducke) C. M. Taylor

Basanacantha echinocarpa (Sessé & Moç. ex DC.) Bullock, Hook. Ic. Pl. 3: t. 3298. 1935. *Randia echinocarpa* Sessé & Moç ex DC., Prodr. 4: 385. 1830. Type: MEXICO: *Fl. Mexic. Ic. 469* (presumably MA, n.v., calque G-DC, n.v., copies MEXU, US). *Genipa.*—**Randia echinocarpa** Sessé & Moç. ex DC.

Basanacantha grandifolia Donn. Sm., Bot. Gaz. (Crawfordsville) 55: 436. 1913. Type: COSTA RICA: Forêts de Santo Domingo de Golfo Dulce, Feb 1896, *A. Tonduz 9878* (Lectotype US 941393, here designated (photos MEXU, PTBG); Isolectotypes F (photos MEXU, PTBG), US 577282). Syntype: COSTA RICA: Bords du Río Corozal près Santo Domingo, Golfo Dulce, Apr 1896, *A. Tonduz 9982* (US; F (photos PTBG, MEXU)).—**Randia grandifolia** (Donn. Sm.) Standl.

Basanacantha lasiantha Standl., Contr. U.S. Natl. Herb. 18: 134. 1916. Type: PANAMA: Panamá, Alajuela, Chagres Valley, 30–100 m, 12–15 May 1911, *H. Pittier 3473* (Holotype US 678517 (photos MEXU, PTBG)).—**Randia lasiantha** (Standl.) Standl.

Basanacantha monantha (Benth.) Hook. f. ex Hemsl., Biol.Centr. Amer. Bot. 2: 39. 1881. *Randia monantha* Benth., Pl. Hartweg. 84: 1841. Type: GUATEMALA: Río de los Esclavos, *T. Hartweg 582* (Holotype K (photos F, MEXU); Isotypes B, presumably destroyed (photo MO), BM, P (label states

"Mexique," photos MEXU, PTBG)).—**Randia monantha** Benth.

Basanacantha pittieri Standl., Contr. U.S. Natl. Herb. 18: 134. 1916. Type: COSTA RICA: Gent Junction, près Matina, Fev 1900, *H. Pittier 16036* (Holotype US 578473 (photos K, MEXU, PTBG); Isotypes F, P (fragment F, photos MEXU, PTBG)).—**Randia pittieri** (Standl.) Standl.

Basanacantha pringlei S. Watson, Proc. Amer. Acad. Arts 18: 98. 1883. Type: MEXICO: Coahuila, Jimulco, mountains, 9 Apr 1885, *C. G. Pringle 142* (Holotype GH, n.v.; Isotypes A, n.v., BM, F (photos MEXU, PTBG), MEXU, P (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Randia pringlei** (S. Watson) A. Gray

Basanacantha reticulata S. Watson, Proc. Amer. Acad. Arts 21: 379. 1886. Type: MEXICO: Coahuila, S. Lorenzo de Laguna, Feb–Oct 1880, *E. Palmer 393* (Holotype US 47705 (photos MEXU, PTBG)).—**Randia pringlei** (S. Watson) A. Gray

Basanacantha spinosa (Jacq.) K. Schum. var. *guatemalensis* K. Schum. ex Loes., Verhandl. Bot. Ver. Brandenburg 65: 110. 1923. Type: GUATEMALA: "La Antigua, above Alotengo," *E. Seler & C. Seler 2570* (Holotype B, presumably destroyed).—**Randia armata** (Sw.) DC.

Basanacantha subcordata Standl., Contr. U.S. Natl. Herb. 18: 133. 1916. Type: COSTA RICA: Buissons et bois des chemins à Nicoya, May 1900, *A. Tonduz 13934* (Holotype US 861251 (photos MEXU, PTBG); Isotypes B, destroyed (fragment F, photos MEXU, PTBG), GH, n.v., LE, n.v. (fragment F, photo PTBG), P (photos MEXU, PTBG; fragment F, photos MEXU, PTBG)). *Randia*.—**Randia monantha** Benth.

Basanacantha tetracantha (Cav.) Hook. f. in Jacks., Ind. Kew. 277. 1893. *Mussaenda tetracantha* Cav., Icon. Pl. 4: 20, *pl. 435*. 1799. Type: MEXICO: [Probably Guerrero], cerca Acapulco, *Née s.n.* (Holotype MA, n.v. (photos F, MEXU, MO)).—**Randia tetracantha** (Cav.) DC.

Bathysa C. Presl, Bot. Bemerk. 84. 1844. Type: Bathysa stipulata C. Presl

Bathysa panamensis Dwyer, Ann. Missouri Bot. Gard. 55: 34. 1968. Type: PANAMA: Darién, Río Ucurganti, 7 Jul 1967, *N. Bristan 1187* (Holotype MO 1968219 (photo PTBG); Isotype GH, n.v.).—**Status uncertain.**

Bathysa veraguensis Dwyer, Ann. Missouri Bot. Gard. 67: 40, *fig. 9.* 1980. Type: PANAMA: Veraguas, Cerro Tute, 1200 m 28 Sep 1972, *E. A. Lao & A. Gentry 531* (Holotype MO 2164349 (photo PTBG)).

Belicea Lundell, Contr. Univ. Michigan Herb. 8: 86. 1942. Type: Belicea hoffmannioides Lundell. [Herein treated as a synonym of *Morinda* L.]

Belicea hoffmannioides Lundell, Contrib. Univ. Michigan Herb. 8: 87. 1942. Type: BRITISH HONDURAS (BELIZE): Toledo Distr., Swasey Branch, Monkey River, near falls, 7 Mar 1942, *P. H. Gentle 3945* (Holotype TEX-LL, n.v.; Isotypes A, n.v., MO (photo PTBG)).—**Morinda asperula** Standl.

Berghesia C. G. D. Nees, Linnaea 20: 701. 1847. Type: Berghesia coccinea C. G. D. Nees. [Genus of uncertain status. According to Nees's protologue description, *Berghesia* belongs to "tribu Cinchoneae," the capsule is 2-locular, and each locule is 1-seeded.]

Berghesia coccinea C. G. D. Nees, Linnaea 20: 702. 1847. Type: MEXICO, without precise locality, *De Berghes s.n.* (Holotype possibly LE, M, or GZU, n.v.).—**Status uncertain.**

Bertiera Aubl., Hist. Pl. Guiane 1: 180. 1775, as "Berthiera." Type: Bertiera guianensis Aubl.

Bertiera aequaliramosa Steyerm., Mem. New York Bot. Gard. 17: 319. 1967. Type: PANAMA: Bocas del Toro, Region of Almirante, Buena Vista Camp on Chiriquí Trail at 1250 ft., Jan–Mar 1928, *G. Proctor-Cooper 586* (Holotype NY, n.v.; Isotypes F, MO (photos MEXU, PTBG), US).—**Bertiera guianensis** Aubl.

Bertiera angustifolia Benth., Bot. Voy. Sulphur 103. 1844. Type: COSTA RICA: Cocos Island, *Barclay s.n.* (Holotype BM, n.v.).
Bertiera guianensis Aubl., Hist. Pl. Guiane 1: 180, *pl. 69*. 1775. Type: FRENCH GUIANA: "prope Aroura," *Aublet s.n.* (Holotype presumably BM, n.v.).
Bertiera guianensis var. *leiophylla* Steyerm., Mem. New York Bot. Gard. 17: 319. 1967. Type: PANAMA: Chiriquí, vicinity of San Felix, 0–120 m, 17 Dec 1911, *H. Pittier 5178* (Holotype NY, n.v.; Isotype US (photos MEXU, PTBG)).—**Bertiera guianensis** Aubl.
Bertiera oligosperma Wernham, J. Bot. 50: 162. 1912. Type: NICARAGUA: *Seemann 129* (Holotype BM, n.v.).—**Status uncertain.**
Bertiera panamensis Standl., N. Amer. Fl. 32: 180. 1934. Type: PANAMA: Darién, Cana and vicinity, 2000–5600 ft., 17 Apr–8 Jun 1908, *R. S. Williams 832* (Holotype US 678312 (photos MEXU, PTBG); Isotype NY, n.v.).—**Raritebe palicoureoides** Wernham subsp. **dwyeranum** J. H. Kirkbr.
Bertiera tenuis Lundell, Wrightia 4: 49. 1968. Type: GUATEMALA: Alta Verapaz, Sebol, in high forest about 800 m west of village, bordering arroyo, 15 Apr 1964, *E. Contreras 4318* (Holotype TEX-LL (photos MEXU, PTBG); Isotype F).—**Bertiera guianensis** Aubl.
Bertiera viburnoides (Standl.) J. H. Kirkbr., Brittonia 31: 311. 1979. *Raritebe viburnoides* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 7: 56. 1930. Type: COLOMBIA: "Caucas, La Gallera, Mica Valley," *Killip 7934* (Holotype US, n.v., fragment F, n.v.; Isotypes G, n.v., Y, n.v.).

Blepharidium Standl., J. Wash. Acad. Sci. 8: 59. 1918. Type: Blepharidium guatemalense Standl.
Blepharidium guatemalense Standl., J. Wash. Acad. Sci. 8: 59. 1918. Type: GUATEMALA: Alta Verapaz, forest along Saclac River, below Secanquím, 300 m, 7 May 1905, *H. Pittier 266* (Holotype US 472925 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).
Blepharidium mexicanum Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 108. 1940. Type: MEXICO: Chiapas, Rvina [Ruina], Palenque, 10–12 Jul 1939, *E. Matuda 3670* (Holotype F 1011462 (photo PTBG); Isotypes A, n.v., TEX-LL (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Blepharidium guatemalense** Standl.

Borojoa Cuatrecasas, Ser. Bot. Aplicada, Serv. Devulg., Secr. Agric. Ganad. (Calí, Colombia) 2: 474. 1949. (Preprint of Rev. Acad. Colombia Ci. Exact. 7: 474. 1950.) Type: Borojoa patinoi Cuatrecasas.
Borojoa atlantica Dwyer, Ann. Missouri Bot. Gard. 67: 46. 1980. Type: PANAMA: Colón, 2–3 miles up from the Río Guanche, 10–20 m, 19 Jan 1973, *H. Kennedy & R. Foster 2197* (Holotype MO 2163702 (photo PTBG); Isotype MO (photo PTBG)).
Borojoa panamensis Dwyer, Phytologia 17: 446. 1968. Type: PANAMA: Coclé, Cerro Pilón, El Valle, 4 Jan 1968, *J. A. Duke & B. R. Lallathin 15014* (Holotype MO 1968459 (photo PTBG); Isotype MO).
Borojoa patinoi Cuatrec., Ser. Bot. Aplicada, Serv. Devulg., Secr. Agric. Ganad. (Calí, Colombia) 2: 474. 1949. (Preprint of Rev. Acad. Colombia Ci. Exact. 7: 474. 1950.) Type: COLOMBIA: Valle, Río Calima (región del Chocó); margen derecha, entre Quebrada de la Brea y La Esperanza, 25 m, 19 May 1946, *J. Cuatrecasas 21137* (Holotype F 1251558 (photo PTBG); Isotypes F (3 sheets), US (photo PTBG)).

Borreria G. Mey., Prim. Fl. Esseq. 79, *t. 1*. 1818. Type: Borreria suaveolens G. Mey., excl. ref. Browne Jam. 141, no. 4, nom. et typ. cons. [Herein treated as a synonym of *Spermacoce* L. In cases where generic transfers have not yet been published, the correct genus is given in boldface type.]
Borreria arenicola Brandegee, Univ. Calif. Publ. Bot. 10: 417. 1924. Type: MEXICO: Chiapas, in sandy arroyo near Jalisco, Aug 1923, *C. A. Purpus 8968* (Holotype UC

220266, n.v.).—**Spermacoce densiflora** (DC.) Alain

Borreria aspera M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 130. 1844. Type: MEXICO: Oaxaca, Juquila, 4000 ft., *H. Galeotti 2625* (Holotype BR, n.v.). —**Spermacoce suaveolens** (G. May.) Kuntze

Borreria asperifolia (M. Martens & Galeotti) B. L. Rob., Proc. Amer. Acad. Arts 45: 409. 1910. *Spermacoce asperifolia* M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 132. 1844. Type: MEXICO: Oaxaca, près de l'Océan Pacifique, *H. Galeotti 2626* (Holotype BR, n.v.; Isotype P, n.v. (photo MO)).—**Staelia scabra** (C. Presl) Standl.

Borreria assurgens (Ruiz & Pav.) Griseb., Abh. Königl. Ges. Wissensch. Göttingen 19: 159. 1874. *Spermacoce assurgens* Ruiz & Pav., Syst. Veg. Fl. Peru 1: 60, *t. 92b*. 1798. Type: PERU: Habitat in ruderalis Limae Chancay et Huanuci, *Ruiz López & Pavón s.n.* (syntype MA, n.v. (photo MO)); Plukenet Alm. 33, *tab. 136/4* (syntype, n.v.).—**Spermacoce assurgens** Ruiz & Pav.

Borreria auriculata Brandegee, Univ. Calif. Publ. Bot. 10: 417. 1924. Type: MEXICO: Chiapas, meadows near Jalisco, Aug 1923, *C. A. Purpus 9218* (Holotype UC, n.v.; Isotype F (photo PTBG)).—**Crusea psyllioides** (Kunth) W. R. Anderson

Borreria bartlingiana DC., Prodr. 4: 544. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.). —**Spermacoce latifolia** Aubl.

Borreria chiapensis Brandegee, Univ. Calif. Publ. Bot. 10: 417. 1924. Type: MEXICO: Chiapas, Hacienda Monserrate, Sep 1923, *C. A. Purpus 9216* (Holotype UC 223384, n.v.; Isotypes F (photo PTBG), NY, n.v., US (photos MEXU, PTBG)).—**Crusea setosa** (M. Martens & Galeotti) Standl. & Steyerm.

Borreria densiflora DC., Prodr. 4: 542. 1830. Type: JAMAICA: Without precise locality, *Swartz s.n.* (Holotype G-DC, n.v. (microfiche 4: 542.3)).—**Spermacoce densiflora** (DC.) Alain

Borreria distans (Kunth) Cham. & Schltdl., Linnaea 3: 340. 1828. *Spermacoce distans* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 344. 1820. Type: MEXICO: Jalisco, Volcán de Jorullo, 3000 ft., *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO)).—**Diodia apiculata** (Willd. ex Roem. & Schult.) K. Schum., vel sp. aff.

Borreria exilis L. O. Williams, Phytologia 28: 227. 1974. Type: COSTA RICA: Cocos Island, Wafer Bay, 28 June 1932, *J. T. Howell 10178* (Holotype F 1031197 (photo PTBG)). Nom. nov. for *Borreria gracilis* L. O. Williams, Phytologia 26: 487. 1973. —**Spermacoce exilis** (L. O. Williams) C. D. Adams

Borreria fruticosa Standl., J. Arnold Arbor. 11: 42. 1930. Type: HONDURAS: Comayagua, Vicinity of Siguatepec, 1080–1400 m., 14–27 Feb 1928, *P. C. Standley 56240* (Holotype F 581434 (photo PTBG); Isotype US (photos MEXU, PTBG)).—**Spermacoce**

Borreria fruticosa Standl. var. *pubescens* Standl. & L. O. Williams, Ceiba 1: 165. 1950. Type: HONDURAS: El Paraíso, 2 miles W of Güinope, 1400 m, 16 Aug 1946, *L. O. Williams & A. Molina R. 10315* (Holotype US 1206971 (photos MEXU, PTBG); Isotype F (photo PTBG)).—**Spermacoce**

Borreria gracilis L. O. Williams, Phytologia 26: 487. 1973. Not *Borreria gracilis* Scheele, 1843, nor Miq. ex Hook., 1855. Type: COSTA RICA: Cocos Island, Wafer Bay, 28 Jun 1932, *J. T. Howell 10178* (Holotype F 1031197 (photo PTBG)).—**Spermacoce exilis** (L. O. Williams) C. D. Adams

Borreria graminifolia M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 129. 1844. Type: MEXICO: El Sabino, près de Zimapan, 6500 pieds, *H. Galeotti 2599* (Holotype BR, n.v.).—**Spermacoce verticillata** L.

Borreria haenkeana DC., Prodr. 4: 547. 1830. Type: MEXICO: Without precise locality or collector, presumably *Haenke* (G-DEL, n.v. (photo MO)).—**Borreria suaveolens** G. Mey.

Borreria heterophylla Brandegee, Univ. Calif. Publ. Bot. 10: 418. 1924. Type: MEXICO: Chiapas, in sandy arroyo near Jalisco, Aug 1923, *C. A. Purpus 8969* (Holotype UC 220267, n.v.).—**Spermacoce prostrata** Aubl.

Borreria laevigata M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 130. 1844. Type: MEXICO: Michoacán, Vallée de Morelia (Valladolid de Michoacán), or México, la plaine de Jordana, près Toluca, 8000 pieds, *H. Galeotti 2586* (Holotype BR, n.v.; Isotype P, n.v. (photo MO)).—**Spermacoce verticillata** L.

Borreria laevis (Lam.) Griseb., Abh. Kon. Gewiss. Göttingen 7: 231.1857. *Spermacoce laevis* Lam., Tabl. Encycl. et Meth. Bot. 1: 273., n. 1435. 1791. Type: SANTO DOMINGO: Without precise locality, *Martin s.n.* (Holotype P-LA, n.v.).—**Spermacoce tenuior** L. Note: Although *Borreria laevis* sensu Griseb. equals *Spermacoce assurgens* Ruiz & Pav., the type of the basionym, *Spermacoce laevis* Lam., equals the type of *Spermacoce tenuior* L.

Borreria latifolia (Aubl.) K. Schum. in Mart., Fl. Bras. 6(6): 61., *t. 80*. 1888. *Spermacoce latifolia* Aubl., Hist. Pl. Guiana 55. 1775. Type: FRENCH GUIANA: Cayenne, *Aublet s.n.* (Holotype P, n.v.; Isotype MA, n.v. (photo MO)).—**Spermacoce latifolia** Aubl.

Borreria longiseta M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 128. 1844. Type: MEXICO: Veracruz, Zacuapan et Mirador [label on isotype at P states "cordillères près de Vera Cruz, 1000 pieds"], *H. Galeotti 2611* (Holotype BR, n.v.; Isotypes K, n.v., P)). —**Status uncertain**. According to C. D. Adams (pers. comm. 1996) the description does not agree with the type, which actually represents a specimen of *Spermacoce confusa* Rendle.

Borreria malacophylla Standl. & L. O. Williams, Ceiba 1: 165. 1950, nom. illeg., not *Borreris malacophylla* K. Schum., 1903. Type: HONDURAS: El Paraíso, near Galera, moist thicket, 900 m, Nov–Dec 1943, *P. C. Standley 15584* (Holotype US 2215979 (photos MEXU, NY, PTBG); Isotype F). —**Spermacoce assurgens** Ruiz & Pav.

Borreria nesiotica B. L. Rob., Proc. Amer. Acad. Arts 45: 409. 1910. Type: MEXICO: Socorro Island (Revillagigedo Group), 1897, *A. W. Anthony s.n.* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)). —**Spermacoce nesiotica** (B. L. Rob.) G. A. Levin

Borreria oaxacana M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 130. 1844. Type: MEXICO: Oaxaca, près de la ville d'Oaxaca, 5000 pieds, *H. Galeotti 2629* (Holotype BR, n.v.).—**Spermacoce verticillata** L.

Borreria ocymoides (Burm.f.) DC., Prodr. 4: 544. 1830. Type: Tropical Asia, collector unknown, (Holotype presumably G, n.v.). *Spermacoce ocymoides* Burm.f., Fl. Ind. 34. 1768. This name has been erroneously applied by many authors to tropical American taxa of *Spermacoce* with small leaves and flowers, including *S. exilis, S. ovalifolia*, and *S. prostrata*.

Borreria ovalifolia M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 129. 1844. Type: MEXICO: Veracruz, Mirador, 5000 pieds, *H. Galeotti 2606* (Holotype BR, n.v.). —**Spermacoce ovalifolia** (M. Martens & Galeotti) Hemsl.

Borreria patula M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 128. 1844. Type: MEXICO: Veracruz, Mirador, 3000 pieds, *H. Galeotti 2608* (Holotype BR, n.v.; Isotype K, n.v.).—**Spermacoce prostrata** Aubl.

Borreria podocephala DC., Prodr. 4: 542. 1840. Type: MEXICO or CUBA: Without precise locality or collector, based on living material (IDC 800.719.II.1 (photo MO)). —**Spermacoce verticillata** L.

Borreria procera Schltdl., Linnaea 9: 593. 1834. Type: MEXICO: Veracruz, Hacienda de la Laguna, *Schiede & Deppe 250* (Holotype HAL, n.v.).—**Spermacoce suaveolens** (G. Mey.) Kuntze

Borreria pumilio Standl., Ann. Missouri Bot. Gard. 27: 342. 1940. Type: PANAMA: Coclé, Natá, ca. 50 m, 12 Sep 1938, *P. H. Allen 822* (Holotype MO 1808165 (photos MEXU, PTBG); Isotypes F (photo PTBG), GH, n.v., US (photo PTBG)).—**Spermacoce**

Borreria radicosa Brandegee, Univ. Calif. Publ. Bot. 10: 416. 1924. Type: MEXICO: Chiapas, meadows near Jalisco, Aug 1923, *C. A. Purpus 9223* (Holotype UC 223392, n.v.;

Isotypes GH, n.v., US (photos MEXU, PTBG)).—**Spermacoce densiflora** (DC.) Alain

Borreria rhadinophylla B. L. Rob., Proc. Amer. Acad. Arts 45: 409. 1910. Type: BRITISH HONDURAS (BELIZE): On dry sandy pine ridges, 23 Oct 1905, *M. E. Peck 180* (Holotype GH, n.v.).—**Mitracarpus rhadinophyllus** (B. L. Rob.) L. O. Williams

Borreria scabiosoides Cham. & Schltdl., Linnaea 3: 318. 1828. Type: BRAZIL: Rio de Janeiro, *Sellow s.n.* (presumably B, destroyed?).—**Spermacoce scabiosoides** (Cham. & Schltdl.) Kuntze

Borreria setosa M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 131. 1844. Type: MEXICO: Oaxaca, dans les forêts de palmiers et sur les dunes de la côte d'Oaxaca, baignée par l'Océan Pacifique, près du Rancho du Rio Grande, Sep 1839, *H. Galeotti 2627* (Holotype BR, n.v.; Isotype P, n.v. (photo MO)).—**Crusea setosa** (M. Martens & Galeotti) Standl. & Steyerm.

Borreria suaveolens G. Mey., Prim. Fl. Esseq. 81., *pl. 1*. 1818. Type: SURINAM: In arenosis continentis circa Arouabischkreck, *G. Meyer s.n.* (Holotype GOET, n.v.).—**Spermacoce suaveolens** (G. Mey.) Kuntze

Borreria subulata DC. Prodr. 4: 543. 1830. Type: MEXICO: Without precise locality, 3 Sep 1827, *Berlandier 826* (Lectotype G-DEL, n.v. (photos MO, US), B (specimen annotated by de Candolle but not cited in protologue); Isolectotype BM, n.v.; designated by Anderson, 1972). *Crusea*.—**Crusea diversifolia** (Kunth) W. R. Anderson

Borreria tampicana DC., Prodr. 4: 544. 1830. Type: MEXICO: Tamaulipas, Tampico, 1827, *Berlandier 37 bis* (Holotype G-DC, n.v. (photo MO); Isotype BM, n.v.).—**Spermacoce prostrata** Aubl.

Borreria tenella (Kunth) Cham. & Schltdl., Linnaea 3: 317. 1828. *Spermacoce tenella* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. & Sp. 3: 345. 1820. Type: Locality unknown, *Humboldt s.n.* (Holotype B-W, n.v. (photo MO)).—**Spermacoce suaveolens** (G. Mey.) Kuntze

Borreria tonalensis Brandegee, Univ. Calif. Publ. Bot. 6: 191. 1915. Type: MEXICO: Chiapas, Sierra de Tonalá, *C. A. Purpus 7369* (Holotype UC, n.v.; Isotype GH, n.v.).—**Spermacoce**

Borreria vegeta Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 21. 1943. Type: GUATEMALA: Dept. Jutiapa, between Jutiapa and La Burrera, NE of Jutiapa, 800–850 m, 1 Nov 1940, *P. C. Standley 76007* (Holotype F 1091300 (photos MEXU, PTBG)).—**Spermacoce**

Borreria verticillata (L.) G. Mey., Prim. Fl. Esseq. 83. 1818. Spermacoce verticillata L., Sp. Pl. 102. 1753. Type: JAMAICA: Hort. Cliff. 33: (BM, n.v.).—**Spermacoce verticillata** L.

Borreria verticillata (L.) G. Mey. var. *thymiformis* B. L. Rob., Proc. Amer. Acad. Arts 45: 410. 1910. Type: MEXICO: Oaxaca, 18 miles SW of city of Oaxaca, 7000–8000 ft., 10–20 Sep 1894, *E. W. Nelson 1410* (Holotype GH, n.v.; Isotype US 574465 (photos MEXU, PTBG)).—**Spermacoce verticillata** L.

Bouvardia Salisb., Parad. Lond. *pl. 88*. 1807. Type: Bouvardia triphylla Salisb.

Bouvardia alexanderae A. Carter, Madroño 13: 142, *figs. 1, 2*. 1955. Type: MEXICO: Baja California: Distr. del Sur, Arroyo del Salto, E of La Paz, 30 Mar 1949, *A. Carter 2577* (Holotype UC 985926, n.v.; Isotypes F, MEXU, US (photos MEXU, PTBG)). *Carterella*.—**Hedyotis alexanderae** (A. Carter) W. H. Lewis

Bouvardia angustifolia Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 384. 1819. Type: MEXICO: Moran (?), *A. Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO); Isotype F (photo PTBG)).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia bicolor Kunze, Linnaea 20: 24. 1847. Type: Based on plants grown from Mexican seed (the description is taken as the type; designated by Blackwell, 1968).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia bouvardioides (Seem.) Standl., N. Amer. Fl. 32: 102. 1921. *Hedyotis bouvardioides* Seem., Bot. Voy. Herald 296. 1856. Type: MEXICO: NW Mexico [Durango], Sierra Madre, *Seemann s.n.* (Holotype BM, n.v.: Isotypes C, n.v., fragment F (photo PTBG), GH, n.v.).

Bouvardia capitata Bullock, Hook. Ic. Pl. *t. 3296*. 1935. Type: MEXICO: México, Distr. Temascaltepec, Palmar, barranca, 7 Jul 1934, *G. B. Hinton 6319* (Holotype K, n.v.; Isotypes BM, n.v., F (photo PTBG)).

Bouvardia cataphyllaris Bullock, Hook. Ic. Pl. t. 3297. 1935. Type: MEXICO: México, Distr. Temascaltepec, Temascaltepec, 1780 m, 28 Jul 1932, *G. B. Hinton 1131* (Holotype K, n.v.; Isotypes BM, n.v., F (photo PTBG), G, n.v., GH, n.v., MICH, n.v., MEXU, MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Bouvardia chrysantha** Mart.

Bouvardia cavanillesii DC., Prodr. 4: 366. 1830. Nom. superfl., based on *Aeginetia multiflora* Cav.—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia chrysantha Mart., Del. Hort. Monac. Sem. 1848. 4. 1848. Type: MEXICO: [Hidalgo], near Santiaguillo, *Karwinsky s.n.* (Holotype presumably BR, n.v.).

Bouvardia conzattii Greenm., Proc. Amer. Acad. Arts 39: 92. 1903. Type: MEXICO: Oaxaca, San Felipe, 1750 m, Jul–Aug 1900, *C. Conzatti & V. Gonzáles 1067* [published as "*1076*"] (Holotype GH, n.v.).

Bouvardia cordifolia DC., Prodr. 4: 366. 1830. Type: MEXICO: Without precise locality, *Sessé & Moçiño s.n.* (Holotype MA, n.v.; Fl. Mexic. Ic. G-DC, n.v. (photo MO)).

Bouvardia corymbosa Oerst., Vidensk. Meddel. Naturhist. Foren Kjöbenhavn 1852: 46. 1853. Type: NICARAGUA: Without precise locality, *Oersted 11039* (Holotype C, n.v.).—**Bouvardia leiantha** Benth.

Bouvardia deamii Donn. Sm., Bot. Gaz. (Crawfordsville) 49: 445. 1910. GUATEMALA: Fiscal, Rillo de las Nabajas, 3700 ft., 5 Jun 1909, *C. C. Deam 6190* (Holotype US 579579 (photo PTBG); Isotypes A, n.v., F (photo PTBG), GH, n.v., MO (photo PTBG), US (photo PTBG)). *Arachnothryx*.—**Rondeletia deamii** (Donn. Sm.) Standl.

Bouvardia dictyoneura Standl., N. Amer. Fl. 32: 109. 1921. Type: MEXICO: Chiapas, Chicharras, 3000–6000 ft., 6 Feb 1896, *E. W. Nelson 3757* (Holotype US 256554 (photos MEXU, PTBG); Isotype GH, n.v.).

Bouvardia discolor Hook. & Arn., Bot. Beechey Voy. 428. 1840. Type: MEXICO: Oaxaca, inter Tehuantepec et Voca [Boca] del Monte in dit. Oaxaca maxime australis, Sept., *G. Andrieux 334* (Holotype K, n.v.; Isotype P (photos MEXU, PTBG)). Not *Rondeletia discolor* Kunth in Humb., Bonpl. & Kunth, 1820.—**Rondeletia leucophylla** Kunth

Bouvardia dolichantha Loes., Verh. Bot. Ver. Brandenburg 65: 106. 1923. Type: GUATEMALA: Huehuetenango, Distr. Nenton, near Uaxackanal and toward Quen Santo, 1100 m, 9 Jul 1896, *E. Seler & C. Seler 2883* (Holotype B, presumably destroyed (photo MO); Lectotype US 1205579 (photos MEXU, PTBG); Isolectotypes F (fragment), GH, n.v.; designated by Blackwell, 1968). —**Bouvardia glabra** Pol.

Bouvardia endlichii Loes., Repert. Sp. Nov. 18: 357. 1922. Type: MEXICO: Durango, *Endlich 176a* (Holotype B, presumably destroyed (photos F, MO, US)).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia erecta (DC.) Standl., N. Amer. Fl. 32: 110. 1921. *Catesbaea erecta* DC., Prodr. 4: 401. 1830. Type: MEXICO: Without precise locality, *Sessé & Moçiño 560* (Holotype MA, n.v.; probable Isotype F (photo PTBG); Fl. Mexic. Ic., MA (photo MO)).

Bouvardia flava Decne., Fl. Serres 1: 215, *pl. 38*. 1845. Type: Based on a greenhouse-grown plant (protologue illustration is the type; designated by Blackwell, 1968). —**Bouvardia laevis** M. Martens & Galeotti

Bouvardia flos-joannis K. Schum., Bull. Herb. Boissier 3: 621. 1895. Type: MEXICO: Prope Puebla, Jul, *E. Seler & C. Seler 846* (Holotype B, presumably destroyed; Isotype GH, n.v.). —**Bouvardia erecta** (DC.) Standl.

Bouvardia flos-joannis K. Schum. var. *latifolia* Loes., Repert. Sp. Nov. 18: 358. 1922. Type: MEXICO: Puebla, N of Tehuacán, 1725 m, *Endlich 1966* (Holotype B, presumably destroyed).—**Bouvardia erecta** (DC.) Standl.

Bouvardia glaberrima Engelmann in Wisl., Mem. Tour. N. Mex. 106. 1848. Type: MEXICO: Cosihuiriachi, *Wislizenus 161* (Holotype MO (photos MEXU, PTBG); Isotype GH, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia glabra Pol., Linnaea 41: 565. 1877. Type: COSTA RICA: San José, Aug 1875, *Polakowsky 337* (Holotype B, destroyed (photos F, G, MO, US); Lectotype F (photo PTBG), fragment of holotype; designated by Blackwell, 1968).

Bouvardia glabra Pol. var. *gracilis* Pol., Linnaea 41: 566. 1877. Type: COSTA RICA: San José, cultivated, Jun 1875, *Polakowsky 172* (Holotype B, presumably destroyed (photos F, MO)).—**Bouvardia glabra** Pol.

Bouvardia glabra Pol. var. *obtusa* Loes., Verh. Bot. Ver. Brandenburg 65: 106. 1923. Type: GUATEMALA: Quezaltenango, near Almolonga, *E. Seler & C. Seler 2920* (Holotype B, presumably destroyed).—**Bouvardia glabra** Pol.

Bouvardia gracilipes B. L. Rob., Proc. Amer. Acad. Arts 45: 404. 1910. Type: MEXICO: Nayarit, Tepic, 5 Jan–6 Feb 1892, *E. Palmer 1971* (Holotype GH, n.v; Isotypes F, US (photos MEXU, PTBG)).

Bouvardia gracilis A. Gray, Proc. Amer. Acad. Arts 22: 306. 1887. Type: MEXICO: Chihuahua, shade of cliffs, Mapula Mtns., 23 Aug 1887, *C. G. Pringle 1255* (Holotype GH, n.v.; Isotypes F (photo PTBG), MEXU).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia heterophylla Standl., N. Amer. Fl. 32: 107. 1921. Type: GUATEMALA: Santa Rosa, Santa Rosa, 1000 m, May 1892, *Heyde & Lux 3137* (Holotype US 398167 (photos MEXU, PTBG); Isotype GH, n.v.).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia hintonii Bullock, Kew Bull. 1937: 307. 1937 [published as "*hintoni*"]. Type: MEXICO: Mexico, Distr. Temascaltepec, Nanchititla, barranca, 27 Jul 1935, *G. B. Hinton et al. 8107* (Holotype K, n.v.; Isotypes A, n.v., BM, n.v., F, G, n.v., GH, n.v., MEXU, MO (photos MEXU, MO), US (photos MEXU, PTBG)).—**Bouvardia loeseneriana** Standl.

Bouvardia hintoniorum B. L. Turner, Brittonia 38: 111, *fig. 1*. 1986. Type: MEXICO: Guerrero, ca. 42.5 miles SW of Mexico Highway 95 along Milpillas-Atoyac road via Puerto del Gallo, 11.5 miles SW of Filo de Caballo and 6.3 miles SW of Carrazal de Bravo, ca. 8500 ft., 16 Oct 1975, *J. L. Reveal et al. 4232* (Holotype TEX, n.v.; Isotypes MEXU, MO (photo PTBG)).

Bouvardia hirtella Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 384. 1819. Type: MEXICO: *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photos F, MO, US)).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia houtteana Schltdl. ex Planch., Fl. Serres 10: 149, *t. 55*. 1855. Type: The protologue illustration; designated by Blackwell, 1968.—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia hypoleuca Benth., Pl. Hartw. 288. 1848. Type: MEXICO: Ad Aguas Calientes, 1837, *T. Hartweg 1605* (Holotype K, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia induta (B. L. Rob.) Standl., N. Amer. Fl. 32: 109. 1921. *Bouvardia longiflora* var. *induta* B. L. Rob., Proc. Amer. Acad. 45: 404. 1910. Type: MEXICO: Chiapas, Jun–Jul 1864–70, *Ghiesbreght s.n.* (Holotype GH, middle collection, n.v.).—**Bouvardia glabra** Pol.

Bouvardia jacquinii Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 385. 1820. Nom. superfl., based on *Ixora americana* Jacq.—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia jacquinii Kunth var. *exogyna* DC., Prodr. 4: 365. 1830. Type: Based on a plant grown in Salm-Dyck's garden (Holotype G-DC, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia jacquinii Kunth var. *ovata* DC., Prodr. 4: 365. 1830. Nom. superfl., based on *Bouvardia triphylla* Salsib.—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia karwinskyi Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 155. 1930. Type: MEXICO: Tamaulipas, between Victoria and Río Blanco, *Karwinsky 312* (Holotype LE, n.v., fragment F).

Bouvardia laevis M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 236. 1844. Type: MEXICO: Veracruz, au bord des ravins de la colonie de Zacuapan, 3000 pieds, Apr 1840, *H. Galeotti 2600* (Holotype BR, n.v. (fragment F); Isotype P (photos F, MO, US)).

Bouvardia langlassei Standl., N. Amer. Fl. 32: 110. 1921. Type: MEXICO: Guerrero, Yestla [Yextla], 1500 m, 8 Jun 1899, *E. Langlassé 1049* (Holotype US 386252 (photos MEXU, PTBG); Isotypes B, n.v., F (fragment), G, n.v., GH, n.v., P, n.v.).

Bouvardia latifolia Standl., N. Amer. Fl. 32: 111. 1921. Type: MEXICO: Guerrero, Mont de la Piedra, près Aguila, 450 m, 16 Jul 1898, *E. Langlassé 246* (Holotype US 385804 (photos MEXU, PTBG; fragment F); Isotypes B, presumably destroyed (fragment F), GH, n.v., P, n.v.).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia leiantha Benth., Pl. Hartw. 85. 1841. Type: GUATEMALA: In arvis prope Tejar et Chimaltenango, Jul–Aug 1841, *T. Hartweg 583* (Holotype K, n.v.; Isotypes B, presumably destroyed (photo MO), GH, n.v., P, n.v., W, n.v.).

Bouvardia linearis Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 383. 1819. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photos F, MO, US)).–**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia loeseneriana Standl., Field Mus. Nat. Hist., Bot. Ser. 11: 186. 1936. Type: MEXICO: Guerrero, Texquitzín, near Chilapa, 28 Oct 1829, *L. Schultze 89* (Holotype B, presumably destroyed (photo F), fragment F (photo PTBG)).

Bouvardia longiflora (Cav.) Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 386. 1820. *Aeginetia longiflora* Cav., Anal. Ci. Nat. 3: 130, *t. 28, f. 1.* 1801. Type: MEXICO: Between Queretaro and Guanajuato, collector unknown (Holotype MA, n.v.). *Anotis*.

Bouvardia longiflora var. *induta* B. L. Rob., Proc. Amer. Acad. Arts 45: 404. 1910. Type: MEXICO: Chiapas, without precise locality, Jun–Jul 1864–70, *Ghiesbreght s.n.* (Holotype GH, n.v.).—**Bouvardia glabra** Pol.

Bouvardia longiflora var. *latifolia* M. Martens & Galeotti, Bull. Acad. Bruxelles 11: 236. 1844. Type: MEXICO: Oaxaca, montagnes de Calpulalpan, 7000–8000 pieds, *H. Galeotti 2659* (Holotype BR, n.v.).—**Bouvardia longiflora** (Cav.) Kunth

Bouvardia macdougallii Lorence, Novon 4: 119, *fig. 1*. 1994. Type: MEXICO: Oaxaca, Cerro Atravesada–Cerro Azul, "Arroyo Rana," Dec 1956, *T. MacDougall s.n.* (Holotype MEXU (photo PTBG)).

Bouvardia macilenta S. F. Blake, Contr. Gray Herb. 53: 65. 1918. Type: MEXICO: Oaxaca, Miahuatlán, Cerro El Zopilote, 2100 m, 18 May 1917, *C. Conzatti & B. Reko 3288* (Holotype GH, n.v.).—**Bouvardia chrysantha** Mart.

Bouvardia macrantha Standl., N. Amer. Fl. 32: 107. 1921. Type: MEXICO: Puebla, Tlacuiloltepec, 7000–8000 ft., Jul 1909, *C. A. Purpus 3981* (Holotype US 841341 (photos MEXU, PTBG); Isotypes BM, n.v., F, GH, n.v., MO (photos MEXU, PTBG), UC, n.v.).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia matudae Lundell, Lloydia 2: 105. 1939. Type: MEXICO: Chiapas, Mt. Ovando, Feb 1939, *E. Matuda 2667* (Holotype MICH, n.v.; Isotypes A, n.v., F, MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Bouvardia dictyoneura** Standl.

Bouvardia microphylla Schltdl., Linnaea 26: 112. 1853. Type: MEXICO: Without precise locality, *Schiede s.n.* (Holotype B, presumably destroyed).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia mollis Linden in Schltdl., Linnaea 26: 85. 1853. Type: MEXICO: Without precise locality or collector, herb. Lipsky (presumably LE, n.v.).—**Bouvardia laevis** M. Martens & Galeotti

Bouvardia multiflora (Cav.) Schult. & Schult. f., Mant. Syst. Veg. 3: 118. 1827. *Aeginetia multiflora* Cav., Anal. Ci. Nat. 3: 131, *t. 28, f. 2.* 1801; Icon. 6: 52, *t. 572, f. 2.* 1801. Type: MEXICO: Queretaro, *Née s.n.* (Holotype MA, n.v. (photo MO)).

Bouvardia myrtifolia Schltdl., Linnaea 26: 121. 1853. Type: MEXICO: Hacienda de Cocoyotle, *Schiede s.n.* (Holotype B, presumably destroyed).—**Bouvardia chrysantha** Mart.

Bouvardia nubigena Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 382. 1940. Type: GUATEMALA: Jutiapa, Volcán de Suchitán, NW of Asunción Mita, 2050 m, 18 Nov 1939, *J. A. Steyermark 31901* (Holotype F 1043221 (photos F, PTBG)).—**Bouvardia laevis** M. Martens & Galeotti

Bouvardia oaxacana Standl., J. Wash. Acad. Arts 13: 7. 1923. Type: MEXICO: Oaxaca, Distr. Juquila, de Santa Cruz al Aguacate, 500 m, 24 Dec 1921, *C. Conzatti 4513* (Holotype US 1110842 (photos MEXU, PTBG); Isotype GH, n.v.).

Bouvardia obovata Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 385. 1820. Type: MEXICO: Distr. Federal, entre Chapultepec et Tezcoco, Jun 1803–04, *A. Bonpland s.n.* (Holotype presumably P-Bonpland, n.v.).

Bouvardia orizabensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 334. 1931. Type: MEXICO: Veracruz, Orizaba, 1854, *M. Botteri 604* (Holotype P, n.v. (fragment F); Isotype G, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia ovata A. Gray, Pl. Wright. 5: 67. 1853. Type: MEXICO: Sonora, mountain valley from San Pedro to Santa Cruz, Sep 1851, *C. Wright 1117* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia pachecoana Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 22. 1943. Type: GUATEMALA: San Marcos, Barranco Eminencia, road between San Marcos and San Rafael Pie de la Cuesta, 2500–2700 m, 6 Feb 1941, *P. C. Standley 86226* (Holotype F 1093896 (photo PTBG); Isotypes A, n.v., US (photos MEXU, PTBG)).—**Bouvardia dictyoneura** Standl.

Bouvardia pallida Standl., N. Amer. Fl. 32: 102. 1921. Type: EL SALVADOR: Volcán de San Salvador, 1600–1800 m, 7 Apr 1922, *P. C. Standley 22977* (Holotype US 1138686 (photos MEXU, PTBG); Isotype GH, n.v.).—**Bouvardia bouvardioides** (Seem.) Standl.

Bouvardia purpusii Brandegee, Univ. Calif. Publ. Bot. 10: 415. 1924. Type: MEXICO: Chiapas, Hacienda Monserrate, Sep 1923, *C. A. Purpus 9251* (Holotype UC 223423, n.v.; Isotypes F, GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Bouvardia induta** (B. L. Rob.) Standl.

Bouvardia quaternifolia DC., Prodr. 4: 365. 1830. Type: MEXICO: Circa urbem Mexici, *Alaman s.n.* (Holotype G-DC, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia quinqueflora Dehnh. in Schltdl., Linnaea 26: 92. 1853. Type: MEXICO: Without precise locality or collector (location unknown).—**Bouvardia chrysantha** Mart.

Bouvardia quinquenervata Standl., N. Amer. Fl. 32: 108. 1921. Type: MEXICO: Chiapas, San Bartolomé, 22 Mar 1904, *E. A. Goldman 769* (Holotype US 470574 (photos MEXU, PTBG)).

Bouvardia rekoi Standl., N. Amer. Fl. 32: 108. 1921. Type: MEXICO: Oaxaca, Cafetal Montecristo (Cerro Espino), 1000 m, 7 Dec 1917, *B. P. Reko 3650* (Holotype US 867149 (photos MEXU, PTBG)).

Bouvardia rosea Schltdl., Linnaea 26: 116. 1853. Type: MEXICO: Guanajuato, 22 miles west of Xichu, road from Xichu to San Luis de la Paz, 2300 m, 14 Jun 1957, *R. McVaugh 14819* (Neotype MICH, n.v.; designated by Blackwell, 1968).

Bouvardia rosei Standl., N. Amer. Fl. 32: 109. 1921. Type: MEXICO: Durango, Sierra

Madre, 16 Aug 1897, *J. N. Rose 3516* (Holotype US 302493 (photos MEXU, PTBG); Isotype F).

Bouvardia rzedowskii Terrell & S. D. Koch, Novon 4: 179, *fig. 1*. 1994. Type: MEXICO: Oaxaca, ladera caliza con vegetación de encinar, 2300 m, 6 km al SW de Tamazulapan, sobre la carretera a Chilapa, 12 Aug 1977, *J. Rzedowski 35142* (Holotype ENCB; Isotypes ARIZ, n.v., ASU, n.v., MICH, n.v., XAL).

Bouvardia salvadorensis Steyerm., Ceiba 4: 302. 1955. Type: EL SALVADOR: Sonsonante, Río Acachapa near headquarters of Hacienda Las Tablas, Balsam Range, 570 m, May 1941, *J. M. Tucker 1368* (Holotype F 1492726 (photo PTBG); Isotypes MICH, n.v., UC, n.v., US (photos MEXU, PTBG)). —**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia scabra Hook. & Arn., Bot. Beechey Voy. 427. 1840. Type: MEXICO: Nayarit, between San Blas and Tepic, *Sinclair s.n.* (Holotype K, n.v.).

Bouvardia scabrida M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 237. 1844. Type: MEXICO: Oaxaca, ravin de Yavezia, cordillère orientale, 6000–7000 pieds, Dec 1840, *H. Galeotti 2624* (Holotype BR, n.v.; Isotype P, n.v. (photo MO)).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia schiedeana Schltdl., Linnaea 26: 123. 1853. Type: MEXICO: Barranca de Tioselo, Aug, *Schiede s.n.* (Holotype B, presumably destroyed).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia splendens J. Graham, Bot. Mag. *pl. 3781*. 1840. Type: Based on greenhouse-grown plants (Holotype K, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia standleyana W. H. Blackw., Ann. Missouri Bot. Gard. 55: 13. 1968. Type: MEXICO: Michoacán, Coalcomán, S Naranjillo, 1360 m, 26 Nov 1938, *G. B. Hinton et al. 12677* (Holotype US 2020693 (photos MEXU, PTBG); Isotypes K, n.v., MICH, n.v., UC, n.v.).

Bouvardia steyermarkii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 383. 1940. Type: GUATEMALA: Zacapa, Sierra de las Minas, between Río Hondo and Finca Alejandria, 1700–2000 m, 11 Oct 1939, *J. A. Steyermark 29671* (Holotype F 1043386 (photos F, PTBG)).—**Bouvardia dolichantha** Loes.

Bouvardia strigosa Benth., Pl. Hartweg. 75. 1841. Type: GUATEMALA: Quezaltenango, [Volcán] Zuníl, Nov., *T. Hartweg 530* (Lectotype K (photo PTBG), here designated; Isolectotypes G-DEL, n.v. (fragment F), P (photos MEXU, MO, PTBG), W, n.v. (photos F, MO)). Syntype: GUATEMALA: Volcán de Fuego, 6000–6400 ft., *Salvin s.n.* (K (photo PTBG),fragment F). *Rogiera*.—**Rondeletia strigosa** (Benth.) Hemsl.

Bouvardia subcordata Standl., N. Amer. Fl. 32: 105. 1921. Type: MEXICO: Sinaloa, near Colomas, 13 Jul 1897, *J. N. Rose 1628* (Holotype US 300476 (photos MEXU, PTBG); Isotype F).

Bouvardia tenuiflora Schltdl., Linnaea 26: 97. 1853. Type: Based on living plants in cultivation (B, presumably destroyed). —**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia tenuifolia Standl., N. Amer. Fl. 32: 104. 1921. Type: MEXICO: Jalisco, grassy hillsides near Guadalajara, Oct 1889, *C. G. Pringle 2292* (Holotype US 49988 (photos MEXU, PTBG); Isotypes A, n.v., BM, n.v., BR, n.v., F, G, n.v., LE, n.v., M, n.v., MICH, n.v., MO, MSC, n.v., P, n.v., US, n.v., W, n.v.).

Bouvardia ternifolia (Cav.) Schltdl., Linnaea 26: 98. 1853. *Ixora ternifolia* Cav., Ic. 4: 3, *t. 305*. 1797. Lectotype: Protologue illustration of *Ixora ternifolia* Cav., Ic. 4: 3, *t. 305*. 1797 (based on a plant grown at MA from Mexican seed; designated by Blackwell, 1968).

Bouvardia ternifolia (Cav.) Schltdl. var. *angustifolia* (Kunth) B. L. Rob., Proc. Amer. Acad. Sci. 45: 405. 1910. *Bouvardia angustifolia* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 384. 1819. Type: MEXICO: Moran (?), *A. Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO);

Isotype F (photo PTBG)).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia tolucana Hook. & Arn., Bot. Beechey Voy. 427. 1840. Type: MEXICO: México, Toluca, *Andrieux 332* (Holotype K, n.v.; Isotype W, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia triflora Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 386. 1820. Type: MEXICO: In temperatis, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (fragment P, n.v.)). *Houstonia*.—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia triflora Kunth var. *hirsuta* M. Martens & Galeotti, Bull. Acad. Bruxelles 11: 236. 1844. Type: MEXICO: Oaxaca, cordillère orientale, dans les montagnes du Rincon, 5000 pieds, *H. Galeotti 2658 bis* (Holotype BR, n.v.).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia triphylla Salisb., Parad. Lond., *pl. 88*. 1807. Nom. superfl., based on *Ixora ternifolia* Cav.—**Bouvardia ternifolia** (Cav.) Schltdl.

Bouvardia venosissima Lundell, Bull. Torrey Bot. Club 66: 602. 1939. Type: MEXICO: Chiapas, Mt. Tacaná, 1400 m, 17–23 Mar 1939, *E. Matuda 2748* (Holotype MICH, n.v.; Isotype MEXU).—**Bouvardia dictyoneura** Standl.

Bouvardia versicolor Ker Gawl., Bot. Reg. 3: *pl. 245*. 1817. Type: Based on a greenhouse-grown plant (the protologue illustration is taken as the type; designated by Blackwell, 1968).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia versicolor Ker Gawl. var. *graciliflora* A. Gray in S. Watson, Proc. Amer. Acad. Arts 22: 416. 1887. Type: MEXICO: Jalisco, Río Blanco, *E. Palmer 154* (Syntype GH, n.v.); Tequila, *E. Palmer 369* (Syntype GH, n.v.); Chapala, *E. Palmer 708* (Syntype GH, n.v.).—**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Bouvardia villosa Standl., N. Amer. Fl. 32: 107. 1921. Type: MEXICO: Oaxaca, Alturas de Matatlán, 1800 m, *C. Conzatti 1486* (Holotype US 764094 (photos MEXU, PTBG)); Isotypes G-DEL, n.v., fragment F (photo PTBG), GH, n.v.).—**Bouvardia xylosteoides** Hook. & Arn.

Bouvardia viminalis Schltdl., Linnaea 26: 120. 1854. Type: MEXICO: Oaxaca, Monte Albán, 6000 ft., 4 Sep 1894, *C. G. Pringle 4888* (Neotype MO 174074 (photos MEXU, PTBG); Isoneotypes BM, n.v., BR, n.v., F, GH, n.v., M, n.v., MEXU, 2 sheets, MSC, n.v., P, n.v., UC, n.v., US (photos MEXU, PTBG), W, n.v.; designated by Blackwell, 1968).

Bouvardia violacea Rzed., Ciencia (México) 19: 82. 1959. Type: MEXICO: San Luís Potosí, *J. Rzedowski 7680* (Holotype MEXU; Isotype ENCB).—**Bouvardia rosea** Schltdl.

Bouvardia xestosperma (B. L. Rob. & Greenm.) Terrell & S. D. Koch, Novon 4: 181. 1994. *Oldenlandia xestosperma* B. L. Rob. & Greenm., Proc. Amer. Acad. Arts 32: 41. 1896. Type: MEXICO: Oaxaca, open glades, Sierra de San Felipe, 8000 ft., Jun 1894, *C. G. Pringle 4692* (Lectotype GH, n.v.; Isolectotypes BM, n.v., CM, n.v., F, K, n.v., MEXU, 2 sheets, MICH, n.v., MO (photos MEXU, PTBG), MSC, n.v., PH, n.v., US, 2 sheets, VT, n.v.; designated by Terrell, 1980).

Bouvardia xylosteoides Hook. & Arn., Bot. Beechey Voy. 428. 1840. Type: MEXICO: Oaxaca, on slightly elevated mountains about Mitlam [Mitla], *Andrieux 335* (Holotype K, n.v.; Isotype G-DEL, n.v., fragment F).

Buena Cav., Anal. Hist. Nat. (Madrid) 2: 278, *t. 23*. 1800. Type: Buena panamensis Cav. Not Buena Pohl, 1826. [Herein treated as a synonym of *Gonzalagunia* Ruíz & Pavón.]

Buena panamensis Cav., Anal. Hist. Nat. (Madrid) 2: 279. 1800. Type: PANAMA: Without precise locality, *Née s.n.* (Holotype MA, n.v.; Isotype F (photo PTBG)). *Gonzalea*.—**Gonzalagunia panamensis** (Cav.) K. Schum.

Buena skinneri Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 48. 1853. TYPE: NICARAGUA: Masaya, toppen af Vulkanen Masaya, 2000–3000 ft., *Oersted 11134* (Syntypes C, n.v. (photos A, F), US);

Oersted 11695 (Syntype C, n.v.).
—**Cosmibuena grandiflora** (Ruiz & Pav.) Rusby

Calderonia Standl., J. Wash. Acad. Sci. 13: 290. 1923. Type: Calderonia salvadorensis Standl. [Herein treated as a synonym of *Simira* Aubl.]
Calderonia klugei Standl., J. Wash. Acad. Sci. 15: 6. 1925. Type: PANAMA: Panamá, near Chepo, 1924, *H. C. Kluge 19* (Holotype US 1206424 (photos MEXU, PTBG)). *Sickingia*.
—**Simira klugei** (Standl.) Steyerm.
Calderonia salvadorensis Standl., J. Wash. Acad. Sci. 13: 290. 1923. Type: EL SALVADOR: San Salvador, Jul 1922, *S. Calderón 761* (Holotype US 1151718 (photos MEXU, PTBG)). *Sickingia*.—**Simira salvadorensis** (Standl.) Steyerm.

Callicocca Schreb., Gen. 126. 1789. Type not designated. [Herein treated as a synonym of *Psychotria* L.]
Callicocca ipecacuanha Brot., Trans. Linn. Soc. London 6: 137. 1802. Type: BRAZIL: Without precise locality, *Gomez s.n.* (presumably LISU, n.v.). *Cephaelis*.
—**Psychotria ipecacuanha** (Brot.) Stokes

Calycophyllum DC., Prodr. 4: 367. 1830. Lectotype: Calycophyllum candidissimum (Vahl) DC. (*Macrocnemum candidissimum* Vahl).
Calycophyllum candidissumum (Vahl) DC., Prodr. 4: 367. 1830. *Macrocnemum candidissimum* Vahl, Symb. 2: 38. *pl. 30.* 1791. Type: TRINIDAD: Vicinia St. Marthae, *von Rohr s.n.* (Holotype C, n.v.). *Mussaenda*.

Campylobotrys Lem., Fl. Serres 3: Misc. 37 (ad 260). 1847. Type: Campylobotrys discolor Lem. [Herein treated as a synonym of *Hoffmannia* Sw.]
Campylobotrys argyroneura Lindl., Belg. Hortic. 8: 166. 1858. Type: Based on cultivated material collected by Ghiesbreght in Chiapas, Mexico, type not designated.
—**Hoffmannia discolor** (Lem.) Hemsl.
Campylobotrys discolor Lem., Fl. Serres Jard. Eur. 3: Misc. 37 (ad 260). 1847. Type: Based on cultivated material collected in Mexico by H. Galeotti, type not designated.
—**Hoffmannia discolor** (Lem.) Hemsl.
Campylobotrys discolor Hook., Bot. Mag. *t. 4530*. 1850. Not *Campylobotrys discolor* Lem. 1847. Type: Based on cultivated material received from Paris, said to be from Bahia, Brazil, but most likely from Mexico, type not designated. Later published by Hooker under the new name *Higginsia regalis* Hook. f., Bot. Mag. *t. 5280*. 1861.
—**Hoffmannia regalis** (Hook. f.) Hemsl.
Campylobotrys ghiesbreghtii Lem., Ill. Hortic. 8: *pl. 279*. 1861. Type: Based on living material collected in Mexico by Ghiesbreght, type not designated.—**Hoffmannia ghiesbreghtii** (Lem.) Hemsl.
Campylobotrys pyrophylla Linden, Cat. 16: 2. 1861, nom. nud.—**Hoffmannia refulgens** (Hook. f.) Hemsl.

Carterella Terrell, Brittonia 39: 249. 1987. Type: Carterella alexanderae (A. Carter) Terrell. [Herein treated as a synonym of *Hedyotis* L.]
Carterella alexanderae (A. Carter) Terrell, Brittonia 39: 250. 1987. *Bouvardia alexanderae* A. Carter, Madroño 13: 142, *fig. 1, 2*. 1955. Type: MEXICO: Baja California Sur: Arroyo del Salto, E of La Paz, 24°12'N, 110°7.5'E, 30 Mar 1949, *A. Carter 2577* (Holotype UC 985926, n.v.; Isotype US (photo PTBG)).—**Hedyotis alexanderae** (A. Carter) W. H. Lewis

Casasia A. Rich in Sagra, Cuba 11: 9, *t. 49*. 1850. Type: Casasia calophylla A. Rich.
Casasia chiapensis Miranda, Ceiba 4: 142. 1954. Type: MEXICO: Chiapas, Rancho el Ocote, 30 km al NW de Ocozocuautla, 650 m, 21 May 1950, *F. Miranda 7743* (Lectotype MEXU; designated by Lorence & Dwyer, 1987). Syntype: MEXICO: Chiapas, *F. Miranda 6624* (F). —**Randia matudae** Lorence & Dwyer

Cascarilla (Endl.) Wedd., Ann. Sci. Nat., Bot. sér. 3, 10: 10. 1848. Not Adanson 1763. Type not designated. (Based on *Cinchona* sect. *Cascarilla* Endl.)

Cascarilla bullata Wedd., Ann. Sci. Nat., Bot. sér. 3, 10: 11. 1848. Type: PERU: Puuo, Prov. de Carabaya, Jan–Feb 1847, *Weddel 4358* (Holotype P-Ju, n.v.; Isotypes G, n.v., K, n.v.) Dwyer (1980) erroneously recorded this species from Panama, although it is actually endemic to the southern Andes (L. Andersson, pers. comm. 1996).—**Ladenbergia bullata** (Wedd.) Standl.

Cassupa Humb. & Bonpl., Pl. Aequin. 1: 43, *t 12*. 1806. Type: Cassupa verrucosa Humb. & Bonpl. [Herein treated as a synonym of *Isertia* Schreb.]

Cassupa panamensis Standl., Contr. U.S. Natl. Herb. 18: 135. 1916. Type: PANAMA: Colón, along the Río Fató, 10–100 m, Jul–Aug 1911, *H. Pittier 3889* (Holotype US 678965 (photo PTBG); Isotype US).—**Isertia laevis** (Triana) B. M. Boom

Catesbaea L., Sp. Pl. 1: 109. 1753. Type: Catesbaea spinosa L.

Catesbaea erecta DC., Prodr. 4: 401. 1830. Type: MEXICO: Without precise locality, *Sessé & Moçiño s.n.* (presumably MA, n.v., fragment F); Fl. Mexic. Ic. (G-DC, n.v.)). —**Bouvardia erecta** (DC.) Standl.

Cephaëlis Sw., Prodr. Veg. Ind. Occ. 3: 45. 1788 (nom. cons). Type: Cephaëlis muscosa (Jacq.) Sw., type cons. [Herein treated as a synonym of *Psychotria* L.]

Cephaëlis axillaris Sw., Prodr. Veg. Ind. Occ. 3: 45: 1788. Type: St. Christopher [St. Kitts], *Swartz s.n.* (Holotype presumably S, n.v.). Not *Psychotria axillaris* Willd. 1798. *Evea*, *Tapogomea*.—**Psychotria aubletiana** Steyerm.

Cephaëlis borucana A. R. Molina, Ceiba 4: 31. 1951. Type: COSTA RICA: Puntarenas, forest near Esquinas Experimental Station, area between Río Esquinas and Río Palmar Sur de Osa, 200 ft., 22 May 1950, *P. H. Allen 5540* (Holotype US 2215926 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)). —**Psychotria borucana** (A. R. Molina) C. M. Taylor & W. C. Burger

Cephaëlis bristanii Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 34. 1968. Type: PANAMA: Darién, Cerro Pirre, *Bristan 575* (Holotype MO 1961544)).—**Psychotria polyphlebia** J. D. Sm.

Cephaëlis camponutans Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 35. 1968. Type: PANAMA: Colón, Cerro Jefe, *Dwyer & Gauger 7346* (Holotype MO).—**Psychotria camponutans** (Dwyer & Hayden) Hammel

Cephaëlis chiapensis (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 295. 1929. *Evea chiapensis* Standl., Contr. U.S. Natl. Herb. 23: 1392. 1926. Not *Psychotria chiapensis* Standl., 1926. Type: MEXICO: Chiapas, Cerro del Boquerón, Sep 1913, *C. A. Purpus 6928* (Holotype US 567214 (photos MEXU, PTBG); Isotypes F, GH, n.v., MO (photos MEXU, PTBG)).—**Psychotria molinarum** Lorence

Cephaëlis chiriquiensis Standl., Ann. Missouri Bot. Gard. 28: 469. 1941. Type: PANAMA: Chiriquí, vicinity of Bajo Chorro, 1900 m, 20–22 Jul 1940, *R. E. Woodson, Jr. & R. W. Schery 610* (Holotype MO 1209028 (photos MEXU, PTBG); Isotypes F, GH, n.v.). —**Psychotria chiriquiensis** (Standl.) C. M. Taylor

Cephaëlis chlorochlamys Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1278. 1938. Type: COSTA RICA: San José, La Hondura de San José, 15 Aug 1933, *J. Valerio 704* (Holotype F 681815 (photo PTBG)). —**Psychotria hazenii** Standl.

Cephaëlis correae Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 36. 1968. Type: PANAMA: Coclé, mountains N of El Valle de Antón, 2500–3000 ft., 28 May 1967, *W. H. Lewis, B. MacBryde, R. L. Oliver & J. E. Ridgway 1759* (Holotype MO 1887361 (photos MEXU, PTBG); Isotypes GH, n.v., US, n.v., UC, n.v.).—**Psychotria correae** (Dwyer & Hayden) C. M. Taylor

Cephaëlis costaricensis Schltdl., Linnaea 28: 546. 1856. Type: COSTA RICA: Type not designated.—**Psychotria elata** (Sw.) Hammel

Cephaëlis croatii Dwyer, Ann. Missouri Bot. Gard. 67: 64. 1980. Type: PANAMA: Darién, upper gold mining camp of Tyler Kittredge, headwaters of Río Tuquesa, ca. 2 air km from continental divide, 26 Aug 1974, *T. B. Croat 27204* (Holotype MO 2201416 (photos MEXU, PTBG); Isotypes F, GH, n.v.). —**Psychotria gentryi** (Dwyer) C. M. Taylor

Cephaëlis dichroa (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 296. 1929. *Evea dichroa* Standl., Contr. U.S. Nat. Herb. 18: 124. 1916. Type: PANAMA: Chiriquí, humid forest of Cuesta de Las Palmas, southern slopes of Cerro de la Horqueta, 1700–2100 m, 17–19 Mar 1911, *H. Pittier 3218* (Holotype US 677615 (photos MEXU, PTBG); Isotype F)).—**Psychotria dichroa** (Standl.) C. M. Taylor

Cephaëlis dimorphandrioides Dwyer, Ann. Missouri Bot. Gard. 67: 66. 1980. Type: PANAMA: Veraguas, Valley of Río Dos Bocas on road between Alto Piedra (above Santa Fé) and Calovébora, 350–400 m, 29 Aug 1974, *T. B. Croat 27470* (Holotype MO 2201358 (photos MEXU, PTBG)). —**Palicourea dimorphandrioides** (Dwyer) C. M. Taylor

Cephaëlis discolor Pol., Linnaea 41: 572. 1877. Type: COSTA RICA: Angustura, 1875, *H. Polakowsky 384* (Holotype B, presumably destroyed (photos F, MO, US), fragment F (photo PTBG)). Not *Psychotria discolor* Huber, 1901, nor *P. discolor* (Griseb.) Rolfe, 1893.—**Psychotria guapilensis** (Standl.) Hammel

Cephaëlis dressleri Dwyer, Ann. Missouri Bot. Gard. 67: 68, *fig. 15*. 1980. Type: PANAMA: San Blas, forest south of Puerto Obaldía, 18 Aug 1971, *T. B. Croat 16801* (Holotype MO 2138462 (photo MO)).—**Psychotria dressleri** (Dwyer) C. W. Ham.

Cephaëlis elata Sw., Prodr. Veg. Ind. Occ. 45. 1788. Type: JAMAICA, *Swartz s.n.* (presumably S, n.v.).—**Psychotria elata** (Sw.) Hammel

Cephaëlis gaugeri Dwyer, Ann. Missouri Bot. Gard. 67: 71. 1980. Type: PANAMA: Panamá, Cerro Jefe, near junction of roads to Cerro Jefe and Altos de Pacora, 18 Dec 1974, *S. Mori & J. Kallunki 3779* (Holotype MO 2240077 (photos MEXU, PTBG)). —**Psychotria camponutans** (Dwyer & Hayden) Hammel

Cephaëlis gentryi Dwyer, Selbyana 2: 57. 1977. Type: ECUADOR: Los Ríos, Río Palenque Science Center, km 56 of Quevedo–Santo Domingo Road, *C. Dodson 5169* (Holotype MO; Isotypes RPSC, n.v., SEL, n.v., US, n.v.).—**Psychotria gentryi** (Dwyer) C. M. Taylor

Cephaëlis glomerulata Donn. Sm., Bot. Gaz. (Crawfordsville) 16: 12. 1891. Type: GUATEMALA: Dept. Livingston, Río Dulce, Mar 1880, *J. D. Smith 1637* (Holotype US 943529 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Psychotria glomerulata** (Donn. Sm.) Steyerm.

Cephaëlis guapilense (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 295. 1929. *Evea guapilensis* Standl., J. Wash. Acad. Arts Sci. 15: 104. 1925. Type: COSTA RICA: Limón, vicinity of Guápiles, 300–500 m, *P. C. Standley 37025* (Holotype US 1153029 (photos MEXU, PTBG)).—**Psychotria guapilensis** (Standl.) C. W. Ham.

Cephaëlis hirsuta M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 135. 1844. Type: MEXICO: Oaxaca, la Chinantla, 4000 pieds, *H. Galeotti 7185* (Holotype BR, n.v.). —**Psychotria poeppigiana** Müll. Arg.

Cephaëlis insueta Dwyer, Ann. Missouri Bot. Gard. 67: 73. 1980. Type: PANAMA: Veraguas, 11 km from Escuela Agrícola Alto de Piedra, forest along Río Dos Bocas, tropical wet forest, Atlantic slope, 15 Nov 1974, *S. Mori & J. Kallunki 3108* (Holotype MO 2220981 (photo PTBG)).—**Psychotria insueta** (Dwyer) C. W. Ham.

Cephaëlis ipecacuanha (Brot.) A. Rich., Bull. Fac. Med. 4: 92. 1818. *Callicocca ipecacuanha* Brot., Trans. Linn. Soc. London 6: 137. 1802. Type: BRAZIL: Without precise

locality, *Gómez s.n.* (presumably LISU, n.v.).
—**Psychotria ipecacuanha** (Brot.) Stokes
Cephaëlis kennedyae Dwyer, Ann. Missouri Bot. Gard. 67: 75. 1980 [as *kennedyi*]. Type: PANAMA: Panamá, 6 km from Panamerican Highway on road from El Llano to Cartí-Tupile, *H. Kennedy 1779* (Holotype MO 2161974 (photo PTBG); Isotype GH, n.v.).
—**Psychotria muscosa** (Jacq.) Steyerm.
Cephaëlis latistipulata Standl., J. Wash. Acad. Sci. 18: 281. 1928. Type: COSTA RICA: Cartago, vicinity of Orosí, 30 Mar 1924, *P. C. Standley 39695* (Holotype US 1153168 (photos MEXU, PTBG)). Not *Psychotria latistipula* Benth. in Hook., 1849.
—**Psychotria cartagoensis** Nepokroeff
Cephaëlis nana (Standl.) Standl., J. Wash. Acad. Sci. 17: 171. 1927. *Evea nana* Standl., J. Wash. Acad. Sci. 15: 105. 1925. Type: PANAMA: Canal Zone, hills north of Frijoles, 19 Dec 1923, *P. C. Standley 27550* (Holotype US 1153871 (photos MEXU, PTBG); Isotype F). Not *Psychotria nana* K. Krause 1908.
—**Psychotria guapilensis** (Standl.) Hammel
Cephaëlis nicaraguensis Standl., Trop. Woods 16: 46. 1928. Type: NICARAGUA: Region of Braggmann's Bluff, on bank of Kukalaya River near Camp 14, 200 ft., 8 Dec 1927, *F. C. Englesing 58* (Holotype F 572595 (photo PTBG)).—**Psychotria guapilensis** (Standl.) Hammel
Cephaëlis ostreophora Wernham, J. Bot. 55: 284. 1917. Type: COLOMBIA: Bogotá, Servitá y Villavicencio, *Triana s.n.* (Holotype BM, n.v.; Isotype F).—**Psychotria ostreophora** (Wernham) C. M. Taylor
Cephaëlis panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 77. 1980. Type: PANAMA: Colón, Río Guanche, ca. 2.5 km upriver from bridge on road to Portobelo, along small creek to the S of the river, 10–100 m, 14 Dec 1974, *S. Mori & J. Kallunki 3714* (Holotype MO 2353037 (photos MEXU, PTBG); Isotypes MO 2353038 (photos MEXU, PTBG), PMA 22701, n.v.).—**Rudgea panamensis** (Dwyer) C. M. Tayor
Cephaëlis panchocoënsis Dwyer, Ann. Missouri Bot. Gard. 67: 78. 1980. Type: PANAMA: Darién, S slope of Cerro Tacarcuna above Río Pucro base camp, 700–1000 m, 25 Jan 1975, *A. Gentry & S. Mori 13895* (Holotype MO 2276226 (photos MEXU, PTBG)).
—**Psychotria dressleri** (Dwyer) C. W. Ham.
Cephaëlis phoenicia (K. Schum.) Donn. Sm., Enum. Pl. Guat. 5: 39. 1899. *Uragoga phoenicia* K. Schum. in Engl. & Prantl, Nat. Pflanzenfam. 4, 4: 120. 1891. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Feb 1896, *J. D. Smith 6584* (Syntype US, n.v.); same locality, *J. D. Smith 6586* (Syntype US, n.v.).—**Psychotria elata** (Sw.) Hammel
Cephaëlis pittieri K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 45. 1916. Type: COSTA RICA: Puntarenas, Cañas Gordas, 1100 m, Feb 1897, *H. Pittier 11162* (Holotype B, presumably destroyed (photos F, MO; fragment F); Isotype US (photos MEXU, PTBG)). Not *Psychotria pittieri* Standl. 1916.
—**Psychotria aurantibracteata** C. M. Taylor
Cephaëlis psychotriifolia Seem., Bot. Voy. Herald 138. 1852 [as *psychotriaefolia*]. Type: PANAMA: Panamá, damp forest near Cruces; and Darién, Chirambira, *Seemann 482* (Holotype BM, n.v. (photo MO); Isotype K [as *Seemann 482bis*]).—**Psychotria psychotriifolia** (Seem.) Standl.
Cephaëlis punicea Vahl, Eclog. Amer. 1: 19. 1796. Type: JAMAICA: Without precise locality, *von Rohr s.n.* (n.v.).—**Psychotria elata** (Sw.) Hammel
Cephaëlis rigidifolia Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 37. 1968. Type: PANAMA: Panamá, Cerro Jefe, ca. 2700 ft., 20 Aug 1967, *J. D. Dwyer 8075A* (Holotype MO 2165097 (photos MEXU, PTBG)). *Palicourea*.—**Status uncertain.**
Cephaëlis sessilifolia Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 295. 1929. Type: MEXICO: Jalisco, Quimixto, trail from San Pedro el Tuito, 60 m, 2 Dec 1926, *Y. Mexia 1240* (Holotype F 579912 (photo PTBG); Isotypes A, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)). Not *Psychotria sessilifolia* M. Martens & Galeotti, 1844.—**Psychotria molinarum** Lorence

Cephaëlis tetragona Donn. Sm., Bot. Gaz. (Crawfordsville) 61: 376. 1916. Type: COSTA RICA: Forêts de Tuis, Oct 1897, *Tonduz 11354* (Syntype US 943500 (photos MEXU, PTBG)), same locality, *Tonduz 12997* (Syntype US). Not *Psychotria tetragona* Seem., 1867.—**Psychotria chiapensis** Standl.

Cephaëlis tomentosa (Aubl.) Vahl, Eclog. Amer. 1: 19. 1796. *Tapogomea tomentosa* Aubl., Hist. Pl. Guiane 1: 160, *pl. 61*. 1775. Type: FRENCH GUIANA: In sylvarum locis apertis, *Aublet s.n.* (Holotype presumably P, n.v.; Isotype B, presumably destroyed (photo MO)). Not *Psychotria tomentosa* Müll. Arg. ex Mart., 1881.—**Psychotria poeppigiana** Müll. Arg.

Cephaëlis tonduzii K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 45. 1916. COSTA RICA: Bei Tuis, 650 m, Nov 1897, *A. Tonduz 11461* (Holotype B, presumably destroyed (photos F, PTBG; fragment F (photo PTBG)). Not *Psychotria tonduzii* Standl., 1925. —**Psychotria guapilensis** (Standl.) Hammel

Cephaëlis vultusmimi Dwyer, Ann. Missouri Bot. Gard. 67: 81, *fig. 17*. 1980. Type: PANAMA: Colón, Santa Rita, E. Ridge, 23 Mar 1972, *A. Gentry & J. D. Dwyer 4811* (Holotype MO 2164626 (photo PTBG); Isotype MO (photo PTBG)).—**Psychotria poeppigiana** Müll. Arg.

Cephaëlis williamsii Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 185. 1930. Type: PERU: Loreto, Manfina, on upper Río Nany, 29 Jun 1929, *L. Williams 1114* (Holotype F 604625). Not *Psychotria williamsii* Standl., 1930.—**Psychotria zevallosii** C. M. Taylor

Cephalanthus L., Sp. Pl. 1: 95. 1753. Type: Cephalanthus occidentalis L.

Cephalanathus berlandieri Wernham, J. Bot. 55: 175. 1917. Type: MEXICO: *Berlandier 1620* (Holotype BM, n.v.).—**Cephalanthus occidentalis** L.

Cephalanthus occidentalis L., Sp. Pl. 1: 95. 1753. Type: America septentrionali, Herb. Linn. 118.1 (Lectotype LINN, n.v.; designated by Reveal, 1993).

Cephalanthus occidentalis L. var. *salicifolius* (Humb. & Bonpl.) A. Gray, Syn. Fl. 1: 29. 1878. *Cephalanthus salicifolius* Humb. & Bonpl., Pl. Aequin. 2: 63. 1809. Type: MEXICO: [Probably Guerrero], near Acapulco, *Humboldt & Bonpland s.n.* (Holotype presumably P-Bonpland, n.v.). —**Cephalanthus salicifolius** Humb. & Bonpl.

Cephalanthus peroblongus Wernham, J. Bot. 55: 176. 1917. Type: MEXICO: Nayarit, Tepic, 31 May–3 Jun 1837, *G. W. Barclay 1193* (Holotype BM, n.v.; Isotype US (photos MEXU, PTBG)).—**Cephalanthus salicifolius** Humb. & Bonpl.

Cephalanthus salicifolius Humb. & Bonpl., Pl. Aequin. 2: 63. 1809. Type: MEXICO: [Probably Guerrero] near Acapulco, *Humboldt & Bonpland s.n.* (Holotype presumably P-Bonpland, n.v.).

Chimarrhis Jacq., Sel. Stirp. Amer. 61. 1763. Type: Chimarrhis cymosa Jacq.

Chimarrhis decurrens Steyerm., Ceiba 3: 18. 1952. Type: PANAMA: Coclé, El Valle, 600 m, 28 Jun 1946, *P. H. Allen 3566* (Holotype F 1394240 (photo PTBG); Isotypes F, 2 sheets, MO).—**Allenanthus erythrocarpa** Standl.

Chimarrhis latifolia Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 265. 1929. Type: PANAMA: Chiriquí, Progreso, Jul–Aug 1927, *G. P. Cooper & G. M. Slater 260* (Holotype F 573160 (photo PTBG); Isotype US (photos MEXU, PTBG)).

Chimarrhis parviflora Standl., Trop. Woods 11: 26. 1927. Type: PANAMA: Bocas del Toro, Changuinola Valley, 1927, *G. P. Cooper & G. M. Slater 120* (Holotype US 1315890 (photos MEXU, PTBG); Isotypes A, n.v., F, NY, n.v.).

Chiococca P. Browne, Civ. Nat. Hist. Jamaica 164. 1756. Type: Chiococca alba (L.) Hitchc.

Chiococca alba (L.) Hitchc., Annual Rep. Missouri Bot. Gard. 4: 94. 1893. *Lonicera alba* L., Sp. Pl. 175. 1753. Type: JAMAICA or BARBADOS: According to Howard (1989), a specimen in the Sloan herbarium (BM) may be an appropriate lectotype.

Chiococca axillares Sessé & Moç., La Naturaleza ser. 2, 1: 36. 1888. Type: MEXICO: Habitat in Tepetlpae prope Sancti Angeli montibus, *Sessé & Moçiño s.n.* (Holotype presumably MA, n.v.; Fl. Mex. Ic. 50 (G-DC, n.v.)).—**Status uncertain.**

Chiococca belizensis Lundell, Amer. Midl. Naturalist 29: 492. 1943. Type: BRITISH HONDURAS (BELIZE): Toledo Distr., Cow Pen, near Monkey River, 2 Sep 1942, *P. H. Gentle 4115* (Holotype MICH, n.v.; Isotypes A, n.v., F (photo F), MO (photos MEXU, PTBG), NY, n.v., TEX-LL, PTBG), US (photos MEXU, PTBG)).

Chiococca caputensis Lorence & C. M. Taylor, Novon 5: 210, *fig. 1B, C.* 1995. Type: PANAMA: Panamá, Cerro Jefe, NE of Panama City, 9°15'N, 79°30'W, 12 Jul 1986, *G. McPherson 9744* (Holotype MO 3624428; Isotype PMA, n.v.).

Chiococca coriacea M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 231. 1844. Type: MEXICO: Veracruz, environs de Vera Cruz, *J. Linden 423* (Holotype presumably BR, n.v.; Isotype MICH, n.v.).

Chiococca durifolia Dwyer, Ann. Missouri Bot. Gard. 67: 87. 1980. Type: PANAMA: Coclé, woods adjacent to chicken farm, La Mesa, above El Valle, 3 Jan 1974, *J. D. Dwyer 11865* (Holotype MO 2188155 (photos MEXU, PTBG)).—**Chiococca belizensis** Lundell

Chiococca filipes Lundell, Contr. Univ. Michigan Herb. 7: 53. 1942. Type: MEXICO: Chiapas, Nuevo Amatenango, 1300 m, 17 Jul 1941, *E. Matuda 4783* (Holotype MICH, n.v.; Isotypes A, n.v., MO (photos MEXU, PTBG), NY, n.v., TEX-LL (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Chiococca alba** (L.) Hitchc.

Chiococca henricksonii M. C. Johnst., Madroño 28: 30. 1981. Type: MEXICO: Coahuila, 1–2 km N. of Puerto Colorado, near crest at SW end of Sierra de la Fragua, near 26°45'N, 102°30'W, 2 Sep 1941, *I. M. Johnston 8738* (Holotype TEX 301584, n.v.; Isotypes F (photo PTBG), GH (photo PTBG), MICH, n.v.).

Chiococca jefensis Dwyer, Ann. Missouri Bot. Gard. 67: 88. 1980. Type: PANAMA: Panamá, La Eneida, region of Cerro Jefe, *R. Dressler 3296* (Holotype MO).—**Elaeagia nitidifolia** Dwyer

Chiococca macrocarpa M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 230. 1844. Type: MEXICO: Veracruz, bois de Mirador, 3000 pieds, *H. Galeotti 7064* (Holotype presumably BR, n.v.).—**Chiococca alba** (L.) Hitchc.

Chiococca mexicana Lundell, Wrightia 5: 71. 1974. Type: MEXICO: Puebla, Mun. de Zacapoaxtla, Tespilco, 1800 m, 23 Apr 1970, *F. Ventura A. 955* (Holotype TEX-LL (photos MEXU, PTBG); Isotype ENCB).—**Chiococca pachyphylla** Wernham

Chiococca nocturna Sessé & Moç., Fl. Mexic., ed. 2, 59. 1894. Type: MEXICO: Habitat in Tuxtlae montibus, floret Julio, *Sessé & Moçiño* (Holotype presumably MA, n.v.). Not *Chiococca nocturna* Jacq. 1761.—**Status uncertain**, probably *Cestrum nocturnum* L. (Solanaceae), as protologue states leaves alternate, flowers nocturnal, smelling of jasmine.

Chiococca oaxacana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 383. 1940. Type: MEXICO: Oaxaca, Cerro de San Antonio, 1650 m, 26 Jun 1906, *C. Conzatti 1418* (Holotype F 579006 (photos F, PTBG); Isotypes GH (fragment), US).

Chiococca pachyphylla Wernham, J. Bot. 51: 323. 1913. Type: MEXICO: Veracruz, entre Acatlán et Chiconquiaco, *Schiede & Deppe* (Holotype K, n.v.).

Chiococca paniculata Sessé & Moç., Fl. Mexic., ed. 2, 58. 1894. Type: MEXICO: Habitat in calidis Cordovae montibus, floret Augusto, *Sessé & Moçiño* (Holotype presumably MA, n.v.). Not *Chiococca paniculata* Hoffmanns. ex Roem. & Schult., 1819.—**Status uncertain.**

Chiococca petenensis Lundell, Wrightia 5: 7. 1972. Type: GUATEMALA: Petén, Dolores, in high forest on Santo Toribio trail, about 200 m west, 7 Jun 1961, *E. Contreras 2439* (Holotype TEX-LL (photo F)).

Chiococca petrina Wiggins, Contr. Dudley Herb. 3: 76, *pl. 20, f. 5–13*. 1940. Type: MEXICO: Sonora, gorge in andesitic rock 23 miles S. of Divisadero, 26 Sep 1934, *I. L. Wiggins 7493* (Holotype DS 263330, n.v.; Isotypes F, TEX-LL, n.v., US (photos MEXU, PTBG)).

Chiococca phaenostemon Schltdl., Linnaea 9: 594. 1834. Type: MEXICO: Veracruz, "In sylvis Jalapae, Majo florens, ad Hac. d. l. Laguna Jul. fructifer," collector not cited (Holotype presumably HAL, n.v.). Note: no actual specimens or collector(s) were cited in Schlechtendal's protologue (1834), merely "In sylvis Jalapae Majo florens, ad Hac. d. l. Laguna Jul. fructifer." There is a *Schiede 255* specimen at Paris (with a duplicate at MO) in Schlechtendal's hand stating only "Mexique." Schlechtendal's types are mostly at HAL, so the holotype [or possibly syntypes] is presumably deposited there. Schiede is known to have collected at Hacienda de la Laguna, Veracruz, and therefore the *Schiede 255* specimens at P & MO are very likely original material, probably isotypes. However, mention of "Jalapa" suggests that Schlechtendal may have been referring to another collection (syntype) as well. This is a vining species with a short, internally villous corolla tube and exserted stamens with filaments villous in the basal half. Collections from southern Mexico and Central America erroneously identified as *Chiococca phaenostemon* have the habit of a small tree, a glabrous corolla, and actually represent *C. pachyphylla* Wernham.

Chiococca pubescens Standl., Contr. U.S. Natl. Herb. 20: 209. 1919. Type: MEXICO: Puebla, vicinity of San Luis Tultitlanapa, Jul 1908, *C. A. Purpus 3334* (Holotype US 840975 (photos MEXU, PTBG); Isotypes F, P). Not *Chiococca pubescens* Humb. & Bonpl. ex Roem. & Schultes, 1819.—**Chiococca pueblensis** Lundell

Chiococca pubescens Standl. var. *peninsularis* Wiggins, Contr. Dudley Herb. 4: 24. 1950. Type: MEXICO: Baja California, Sierra San Francisquito, 18 Oct 1890, *T. S. Brandegee 265* (Holotype DS 20437, n.v.; Isotype UC (n.v.)).—**Status uncertain**, probably **Chiococca pueblensis** Lundell

Chiococca pueblensis Lundell, Wrightia 5: 7. 1972. Nom. nov. for *Chiococca pubescens* Standl., not *Chiococca pubescens* Humb. & Bonpl. ex Roem. & Schultes, 1819.

Chiococca racemosa L., Syst. Nat. ed. 10, 2: 917. 1759. Nom. illegit., citing *Lonicera alba* L.—**Chiococca alba** (L) Hitchc.

Chiococca racemosa Sessé & Moç., Fl. Mexic., ed. 2, 58. 1893, nom. illegit. Not *Chiococca racemosa* L., 1759, nor *C. racemosa* Schltdl. & Cham., 1830. Type: MEXICO: *Sessé & Moçiño* (presumably MA, n.v.).—**Status uncertain,** probably **Chiococca alba** (L.) Hitchc.

Chiococca racemosa L. var. *yucatana* Loes., Repert. Sp. Nov. 18: 361. 1922. Type: MEXICO: Yucatán, im Distrikt Ticul, auf der Hacienda Yaxche, *E. Seler & C. Seler 5591* (Holotype B, presumably destroyed). —**Chiococca alba** (L.) Hitchc.

Chiococca rubriflora Lundell, Wrightia 5: 7. 1972. Type: GUATEMALA: Petén, west of km 165 of Poptun road, 10 Sep 1969, *E. Contreras 9110* (Holotype TEX-LL (photos MEXU, PTBG); Isotype F (photos F, PTBG)).

Chiococca semipilosa Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 279. 1940. Type: GUATEMALA: Chiquimula, Cerro Caracol, 1.5 miles north of Quezaltepeque, 1200–1400 m, 7 Nov 1939, *J. A. Steyermark 31406* (Holotype F 1039351 (photo PTBG)).

Chiococca sessilifolia Miranda, Anales Inst. Biol. México 21(2): 306, *f. 4*. 1950 [1951]. Type: MEXICO: Chiapas, en borde de bosque bajo hacia Las Vistas, al N de Berriozábal, 24 Sep 1950, *F. Miranda 6672* (Holotype MEXU).

Chiococca staminea M. Martens & Galeotti, Bull. Acad. Bruxelles 11: 231. 1844. Type: MEXICO: Veracruz, environs de Xalapa, 4000 pieds, *J. Linden 48* (Holotype BR, n.v.). —**Status uncertain**, probably **Chiococca phaenostemon** Schltdl.

Chiococca steyermarkii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 280. 1940.

Type: GUATEMALA: Dept. San Marcos, Río Vega, near San Rafael and Guatemala-Mexico boundary, Volcán de Tacaná, 2500–3000 m, 20 Feb 1940, *J. A. Steyermark 36237* (Holotype F 1043222 (photos F, PTBG); Isotype F 1043229).

Chiococca vestita Lundell, Wrightia 5: 8. 1972. Type: GUATEMALA: Dept. Petén, Poptun, 2 km east, in hammock in pineland, 13 Jul 1959, *C. L. Lundell 16425* (Holotype TEX-LL, n.v. (photo F)).—**Chiococca semipilosa** Standl. & Steyerm.

Chiococca vestita Lundell var. *glaberrima* Lundell, Wrightia 5: 8. 1972. Type: GUATEMALA: Dept. Petén, Poptun, 2 km east, in hammock in pineland, 13 Jul 1959, *C. L. Lundell 16425A* (Holotype TEX-LL, n.v. (photo F)).—**Chiococca semipilosa** Standl. & Steyerm.

Chione DC., Prodr. 4: 461. 1830. Type: Chione glabra DC.

Chione allenii L. O. Williams, Phytologia 25: 462. 1973. Type: COSTA RICA: Golfo Dulce area, vicinity of Esquinas Experiment Station, sea level, 8 Jul 1949, *P. H. Allen 5321* (Holotype F 1679433; Isotypes MO (photo PTBG), TUL (photo PTBG)).—**Chione sylvicola** (Standl.) W. C. Burger

Chione buxifolia Dwyer & Hayden, Phytologia 15: 55. 1967. Type: PANAMA: Panamá, Cerro Jefe, *E. Tyson et al. 3291* (Holotype MO 2210380 (photo PTBG); Isotypes F, NY, n.v.).

Chione campanensis Dwyer, Ann. Missouri Bot. Gard. 67: 92. 1980. Type: PANAMA: Cerro Campana, trail to Campana Ridge, 2300 ft., 18 Sep 1968, *A. R. Wilbur, R. Foster, H. Kennedy & R. Dressler 1020* (Holotype MO 2224284 (photo PTBG)).

Chione chambersii Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 138. 1967. Type: PANAMA: Comarca de Barú, area near Puerto Armuelles, between Cañazo and Cocos, 17 Jun 1957, *W. I. Stern & K. L. Chambers 144* (Holotype MO 1739838; Isotype GH (photo PTBG)).—**Chomelia microloba** Donn. Sm.

Chione chiapasensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 110. 1940. Type: MEXICO: Chiapas, Palenque, Rvina [Ruina], river side in virgin forest, Jul 1939, *E. Matuda 3675* (Holotype F 1011456 (photo PTBG); Isotypes A, n.v., US (photos MEXU, PTBG), MEXU).

Chione costaricensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 111. 1940. Type: COSTA RICA: Alajuela, Cantón de San Carlos, Villa Quesada, Caribbean rain forest, 825 m, 14 Mar 1939, *Austin Smith F1778* (Holotype F 980765 (photo PTBG); Isotype US (photos MEXU, PTBG)).—**Chione sylvicola** (Standl.) W. C. Burger

Chione dariensis Dwyer, Ann. Missouri Bot. Gard. 67: 94. 1980. Type: PANAMA: Darién, Río Balsa, between Manené and Tusijuanda, 26 Jul 1967, *J. Duke 13571* (Holotype MO 1968196 (photos MEXU, PTBG); Isotypes MO, 2 sheets, US (photo PTBG)).

Chione guatemalensis Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 174. 1940. Type: GUATEMALA: Dept. Izabal, Río Dulce, between Livingston and 6 miles up river, on north side, 1–25 m, 14 Apr 1940, *J. A. Steyermark 39375* (Holotype F 1035017 (photo PTBG)).

Chione mexicana Standl., J. Wash. Acad. Sci. 17: 340. 1927. Type: MEXICO: Veracruz, Zacuapan, open forests, Jun 1926, *C. A. Purpus 10757* (Holotype US 1266079 (photos MEXU, PTBG); Isotypes A, n.v., F, 2 sheets, MO, 2 sheets (photos MEXU, PTBG)).

Chione panamensis Steyerm., Ceiba 3: 19. 1952. Type: PANAMA: Chiriquí, Boquete region, Cerro Horqueta, 6500 ft., 1 Jul 1940, *C. von Hagen & W. von Hagen 2137* (Holotype F 1397595 (photo PTBG); Isotype MO, n.v.).—**Chione sylvicola** (Standl.) W. C. Burger

Chione sylvicola (Standl.) W. C. Burger, Selbyana 12: 138. 1991. *Chomelia ? sylvicola* Standl., J. Wash. Acad. Sci. 18: 182. 1928. Type: COSTA RICA: Heredia, Yerba Buena, northeast of San Isidro, 2000 m, 22–28 Feb 1926, *P. C. Standley & J. Valerio 49196* (Holotype US 1305902 (photo PTBG)).

Chomelia Jacq., Enum. Pl. Carib. 12. 1760. Type: Chomelia spinosa Jacq.

Chomelia atlantica Dwyer, Ann. Missouri Bot. Gard. 67: 96. 1980. Type: PANAMA: Colón, swamp forest and bordering terra firma, ca. 0.5 km from the Río Buenaventura, near Portobelo, 30 Jan 1973, *H. Kennedy & S. Gra 2242* (Holotype MO 2161971 (photo PTBG); Isotype MO)).—**Chomelia barbellata** Standl.

Chomelia barbata Standl., J. Wash. Acad. Sci. 13: 7. 1923. Type: MEXICO: Oaxaca, Juquila, vicinity of Chacahua, 5 m, 17 Dec 1921, *C. Conzatti 4475* (Holotype US 1110841 (photo US)).

Chomelia barbellata Standl., Field Mus. Nat. Hist., Bot. Ser. 13(7): 120. 1936. Type: PERU: San Martín, *Klug 3920* (Holotype F, n.v.).

Chomelia brachyloba Standl., Contr. U.S. Natl. Herb. 18: 136. 1916. Type: PANAMA: Panamá, Sabana de San Juan Corso, near Chepo, 60–80 m, Oct 1911, *H. Pittier 4673* (Holotype US 679833 (photo PTBG)). —**Chomelia spinosa** Jacq.

Chomelia brachypoda Donn. Sm., Bot. Gaz. (Crawfordsville) 47: 255. 1909. Type: GUATEMALA: Alta Verapaz, Sasís, banks of Río Ogewaj, 900 m, May 1908, *H. von Tuerckheim II 2253* (Holotype US 941389 (photos PTBG, US); Isotypes F (photos MEXU, PTBG), US (photo PTBG), W). *Anisomeris*.

Chomelia coclensis Dwyer, Ann. Missouri Bot. Gard. 67: 97. 1980. Type: PANAMA: Coclé, La Mesa above El Valle, 800 m, *T. B. Croat 25396* (Holotype MO 2210285; Isotype MO 2219529).—**Malanea colombiana** Standl.

Chomelia englesingii Standl., Trop. Woods 16: 45. 1928. Type: NICARAGUA: Region of Braggman's Bluff, Kukalaya River bank west of Camp 14, 2 Dec 1927, *F. C. Englesing 49* (Yale 1233) (Holotype F 572606 (photo PTBG)). *Anisomeris*.—**Chomelia recordii** Standl.

Chomelia filipes Benth. in Oerst., Vidensk. Meddel Dansk Naturhist. Foren. Kjobenhavn 1852: 41. 1853. Type: NICARAGUA: Granada, *Oersted s.n.* (Holotype presumably C, n.v. (photo US), fragment US (photo PTBG)).—**Chomelia spinosa** Jacq.

Chomelia grandicarpa Dwyer, Ann. Missouri Bot. Gard. 67: 97. 1980. Type: PANAMA: Colón, 2–3 miles up Río Guanche, lowland rain forest, 10–20 m, 19 Jan 1973, *H. Kennedy & R. Foster 2174* (Holotype MO. 2465399 (photo PTBG); Isotype MO).

Chomelia leucophylla Dwyer, Ann. Missouri Bot. Gard. 67: 98. 1980. Type: PANAMA: Darién, slopes of Cerro Chucula, drainage of Río Pavarando, 11 Feb 1972, *A. Gentry 4262* (Holotype MO; Isotype MO). Not *Rondeletia leucophylla* Kunth, 1820.—**Rondeletia dwyeri** Lorence

Chomelia microloba Donn. Sm., Bot. Gaz. (Crawfordsville) 31: 114. 1901. Type: COSTA RICA: Santo Domingo de Golfo Dulce, Feb 1896, *A. Tonduz 7048 (Herb. Nac. Costa Rica 9874)* (Holotype US 943460 (photo PTBG); Isotypes A, n.v., MO (photos MEXU, PTBG), P (photos MEXU, PTBG), US (3 sheets; photos PTBG)). *Anisomeris*.

Chomelia panamensis (Standl.) Dwyer, Ann. Missouri Bot. Gard. 67: 100. 1980. *Antirhea panamensis* Standl., N. Amer. Fl. 32: 264. 1934. Type: PANAMA: San Blas District, 21–28 Apr 1933, *G. P. Cooper 238* (Holotype F 686345 (photo PTBG); Isotype F 709955). —**Chomelia microloba** Donn. Sm.

Chomelia peninsularis Dwyer, Ann. Missouri Bot. Gard. 67: 101. 1980. Type: PANAMA: Chiriquí, Burica Peninsula, along Quebrada Punta de Piedra, 2 mi SE of Puerto Armuelles, 0–100 m, 1 Mar 1973, *T. B. Croat 22440* (Holotype MO 2785727 (photo PTBG); Isotype F).—**Chomelia microloba** Donn. Sm.

Chomelia pringlei S. Watson, Proc. Amer. Acad. Arts 26: 137. 1891. Type: MEXICO: San Luis Potosí, Tamasopo Canyon, 6 Aug 1890, *C. G. Pringle 3209* (Holotype GH, n.v.; Isotypes A, n.v., F (photos MEXU, PTBG), MO (photos MEXU, PTBG), P (photos MEXU, PTBG), US). *Anisomeris*.

Chomelia protracta (Bartl. ex DC.) Standl., Contr. U.S. Natl. Herb. 23: 1384. 1926. *Guettarda protracta* Bartl. ex DC. Prodr. 4: 457. 1830. Type: MEXICO: Without precise

locality, *Haenke s.n.* (Holotype presumably PR, n.v.). *Anisomeris, Pittoniotis*.

Chomelia psilocarpa Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 139. 1967. Type: PANAMA: Canal Zone, Barro Colorado Island, SE shoreline from lab, Aug 1965, *M. V. Hayden 143* (Holotype MO 1831286 (photo PTBG); Isotypes MO, 3 sheets).

Chomelia purpusii (Brandegee) Rusby, Bull. Torrey Bot. Club 52: 138. 1925. *Anisomeris purpusii* Brandegee, Univ. Calif. Publ. Bot. 6: 70. 1914. Type: MEXICO: Chiapas, Tonalá, Sep 1913, *C. A. Purpus 6940* (Holotype UC, n.v.; Isotypes F (photo PTBG), US (photo PTBG)). *Anisomeris*.—**Chomelia spinosa** Jacq.

Chomelia recordii Standl., Trop. Woods 7: 9. 1926. Type: GUATEMALA: Izabal, Los Andes to Entre Ríos, lower Río Motagua Valley, 1 Mar 1926, *S. J. Record 8862* (Holotype US 1209919 (photo PTBG); Isotype NY, n.v.). *Anisomeris*.

Chomelia recordii Standl. var. *paucipubescens* Dwyer, Ann. Missouri Bot. Gard. 67: 103. 1980. Type: PANAMA: Canal Zone, near archeological site, edge of Madden Lake, *A. Gentry & E. Tyson 5038* (Holotype MO (not located 6/96)).—**Chomelia recordii** Standl.

Chomelia rudis (Standl.) Lorence, Novon 7: 48. 1997. *Anisomeris rudis* Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 394. 1938. Type: HONDURAS: Comayagua, summit of the ridge above El Achote, above the plains of Siguatepeque, 1800 m, 1 Aug 1936, *G. T. Yuncker, R. F. Dawson & H. R. Youse 6253* (Holotype F 857678 (photo PTBG); Isotype MO 1115471).

Chomelia spinosa Jacq., Enum. Pl. Carib. 12. 1760. Type: COLOMBIA: Cartagena, in sylvaticis ad pendem montis de La Popa, *Jacquin s.n.* (location unknown). *Ixora*.

Chomelia sylvicola Standl., J. Wash. Acad. Sci. 18: 182. 1928. Type: COSTA RICA: Heredia, Yerba Buena, northeast of San Isidro, 2000 m, 22–28 Feb 1926, *P. C. Standley & J. Valerio 49196* (Holotype US 1305902 (photo PTBG)). *Anisomeris*.—**Chione sylvicola** (Standl.) W. C. Burger

Chomelia venulosa W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 101. 1993. Type: COSTA RICA: Alajuela, Reserva Biológica Monteverde, *E. Bello 414* (Holotype CR, n.v.; Isotypes F, n.v., MO).

Choristes Benth., Pl. Hartw. 63. 1840. Type: Choristes obtusiflora Benth. [Herein treated as a synonym of *Deppea* Cham. & Schltdl.]

Choristes cornifolia (Benth.) Benth., Pl. Hartw. 64. 1840. *Rondeletia cornifolia* Benth., Pl. Hartw. 39. 1840. Type: MEXICO: Michoacán, prope Morelia, *T. Hartweg 299* (Holotype K (photo MEXU); Isotypes BM, P, US (fragment), W, 2 sheets).—**Deppea cornifolia** (Benth.) Benth.

Choristes obtusiflora Benth., Pl. Hartw. 63. 1840. Type: MEXICO: Oaxaca, in planitie Llano Verde, *T. Hartweg 473* (Holotype K; Isotypes P, F, W, 2 sheets).—**Deppea obtusiflora** (Benth.) Benth.

Cigarrilla Aiello, J. Arnold Arbor. 60: 109. 1979. Type: Cigarilla mexicana (Zucc. & Mart. ex DC.) Aiello. [Herein treated at a synonym of *Nernstia* Urb.]

Cigarrilla mexicana (Zucc. & Mart. ex DC.) Aiello, J. Arnold Arbor. 60: 110. 1979. *Coutarea mexicana* Zucc. & Mart. ex DC., Prodr. 4: 350. 1830. Type: MEXICO: Without precise locality, *Martius s.n.* in 1829 (Holotype G-DC, n.v. (microfiche IDC 800.680: II.7)).—**Nernstia mexicana** (Zucc. & Mart. ex DC.) Urb.

Cinchona L., Sp. Pl. 1: 172. 1753. Type: Cinchona officinalis L.

Cinchona caribaea Jacq., Enum. Pl. Carib. 16. 1760. Type: CUBA: Thickets near Havana, *Jacquin s.n.* (location unknown).—**Exostema caribaeum** (Jacq.) Roem. & Schultes

Cinchona grandiflora Ruiz & Pav., F. Peruv. 2: 54, *pl. 89*. 1799. Type: PERU: Huánuco, Andes de Peru, ad Pozuzo et San Antonii de Playa grande, *Ruiz Lopez & Pavón s.n.* (Holotype presumably MA, n.v.; Isotype B, destroyed (photo P)).—**Cosmibuena grandiflora** (Ruiz & Pav.) Rusby

Cinchona macrocarpa Vahl, Schr. Naturh. Ges. Kopenhagen 1(1): 20. 1793. Type: COLOMBIA: In regno Santa Fé, *Ortega s.n.* (Lectotype BM, n.v.; designated by Andersson in Andersson & Taylor, 1994: 16). —**Ladenbergia macrocarpa** (Vahl) Klotzsch

Cinchona officinalis L., Sp. Pl. 1: 172. 1753. Type: ECUADOR: Habitat in Loxa Peruviae, *Quinquina* La Condamine, Hist. Acad. Roy. Sci. Paris 1738: 226, *t. 5–6*. 1738. (For typification see Andersson & Taylor, 1994: 50.)

Cinchona pubescens Vahl, Skr. Naturhist. Selsk. Kjoebenhavn 1: 119. 1790. Type: Probably ECUADOR: precise locality unknown, *J. de Jussieu s.n.* (Holotype C, n.v. (photos F, MO); Isotype P-JU 9900, n.v.).

Cinchona rosea Ruiz & Pav., Fl. Peruv. 2: 54. 1799. Type: PERU: Huánuco, Pozuzo, *Ruiz Lopez & Pavón s.n.* (Lectotype MA, n.v.; Isolectotypes BM, n.v., G, n.v., G-DC, n.v., K, n.v., MA, n.v., P, n.v.; designated by Andersson in Andersson & Taylor, 1994: 12). —**Macrocnemum roseum** (Ruiz & Pav.) Wedd.

Cinchona succirubra Pav. ex Klotzsch, Abh. Akad. Berl. 1857: 60. 1858. Type: ECUADOR: Bolívar, San Antonio on trail to Guaranda, [*Tafalla* in] *Pavón 464* (Holotype B, presumably destroyed (photo F); Isotypes G, n.v., K, n.v., MA, n.v.).—**Cinchona pubescens** Vahl

Coccocypselum P. Browne, Civ. Nat. Hist. Jamaica 144. 1756. [as Coccocipsilum], nom. et orthogr. cons. Type: Coccocypselum repens Sw., Prodr. Veg. Ind. Occ. 31. 1788, not Kunth, 1819.

Coccocypselum canescens Willd. ex Cham. & Schltdl., Linnaea 4: 139. 1829. Nom. illeg., not *Coccocypselum canescens* Willd. ex Schult. & Schult., 1827. Type: VENEZUELA: Buenavista prope Caracas, *Humboldt s.n.* (Holotype B-W 2874, n.v). *Tontanea.* —**Coccocypselum lanceolatum** (Ruiz & Pav.) Pers.

Coccocypselum ciliatum Cham. & Schltdl., Linnaea 6: 414. 1831. Type: MEXICO: Inter Huitamulco et Cuapa, *Schiede & Deppe 1273* (Holotype presumably HAL, n.v.).—**Status uncertain**, probably **Coccocypselum hirsutum** Bartl. ex DC.

Coccocypselum cordifolium Nees & Mart., Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol. Nat. Cur. 12: 14. 1824. Type: BRAZIL: Ad viam Felisbertiam, *Wied-Neuwied* (location unknown).

Coccocypselum glabrum Bartl. ex DC., Prodr. 4: 397. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 397.14)). *Tontanea.*—**Coccocypselum hirsutum** Bartl. ex DC. var. **glabrum** (Bartl. ex DC.) L. O. Williams

Coccocypselum guianense (Aubl.) K. Schum. in Mart., Fl. Bras. 6(6): 315. 1889. *Tontonea guianensis* Aubl., Hist. Pl. Guiane 1: 108, *tab. 42*. 1775. Type: FRENCH GUIANA: Sylvis Cayenne, *Aublet s.n.* (Holotype presumably P or BM, n.v.).

Coccocypselum herbaceum P. Browne, Civ. Nat. Hist. Jamaica 144, *pl. 6, f. 2*. 1756. Type: JAMAICA: Cooler mountains of Liguancee and Mount-Diable, *P. Browne* (LINN, n.v.). *Tontanea.*

Coccocypselum hirsutum Bartl. ex DC., Prodr. 4: 396. 1830. Type: Precise locality unknown, probably Trinidad, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 396.5)). *Tontanea.*

Coccocypselum hirsutum var. **glabrum** (Bartl. ex DC.) L. O. Williams, Phytologia 25: 462. *Coccocypselum glabrum* Bartl. ex DC., Prodr. 4: 397. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 397.14)).

Coccocypselum hispidulum (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 281. 1929. *Tontanea hispidula* Standl., N. Amer. Fl. 32: 147. 1921. Type: PANAMA: Chagres, Isthmus of Panama, Jan–Feb 1850, *A. Fendler 179* (Holotype US 42058 (photo MO); Isotype US).—**Coccocypselum herbaceum** P. Browne

Coccocypselum lanceolatum (Ruiz & Pav.) Pers., Syn. Pl. 1: 132. 1805. *Condalia lanceolata* Ruiz & Pav., Pl. Fl. Peruv. 1: 54. 1798. Type: PERU: In nemoribus Cuchero et Chinchao, *Ruiz & Pavón s.n.* (Holotype presumably MA, n.v.).

Coccocypselum macropodum (Ruiz & Pav.) Britton, Bull. Torrey Bot. Club 18: 107. 1891. *Psychotria macropoda* Ruiz & Pav., Fl. Peruv. 2: 63, *pl. 211, fig. b.* 1799. Type: PERU: Huánuco, nemoribus secus Pillao ad Iscutunam, *Ruiz & Pavón s.n.* (Holotype presumably MA, n.v.).—**Geophila macropoda** (Ruiz & Pav.) DC.

Coccocypselum pleuropodum (Donn. Sm.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 4: 281. 1929. *Geophila pleuropoda* Donn. Sm., Bot. Gaz. (Crawfordsville) 52: 50. 1911. Type: GUATEMALA: Alta Verapaz, Secanquim, trail to Sepacuité, 4000 ft., 5 Feb 1905, *G. P. Goll s.n.* (Holotype US 860647 (photos MEXU, PTBG)).—**Coccocypselum cordifolium** Nees & Mart.

Coccocypselum rothschuhii Loes., Bot. Jahrb. Syst. 60: 370. 1926. Type: NICARAGUA: Matagalpa, Cañada Yasica, 950 m, *Rothschuh 179* (Holotype B, presumably destroyed).—**Coccocypselum cordifolium** Nees & Mart.

Coffea L., Sp. Pl. 1: 172. 1753. Type: Coffea arabica L.

Coffea arabica L., Sp. Pl. 1: 172. 1753. Type: Habitat in Arabia felici, Herb. Clifford 9, Coffea 1 (Lectotype BM, n.v.; designated by Bridson & Verdcourt, 1988: 713). Widely cultivated in Mexico and Central America.

Coffea canephora Pierre ex Froehner, Notizbl. Bot. Gard. Berlin 1: 237. 1897. Type: GABON: Gabun, *Herb. L. Pierre n. 247* (Holotype presumably P, n.v.). Occasionally cultivated in Mexico and Central America.

Coffea lanceolata Cham. & Schltdl., Linnaea 6: 412. 1831. Type: MEXICO: Veracruz, prope Jalapam, *Schiede & Deppe 1269* (Holotype presumably HAL, n.v.).—**Status uncertain,** possibly **Chiococca** sp.

Coffea liberica W. Bull ex Hieron., Retail List New, Beautiful and Rare Plants 97: 4. 1874; Trans. Linn. Soc., Ser. 2: 171, *tab. 24.* 1876. Type: SIERRA LEONE: *Daniell A608* (Holotype BM, n.v. (photo MO)). Occasionally cultivated in Mexico and Central America.

Coffea mexicana DC., Prodr. 4: 501. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 501.25)).—**Rudgea cornifolia** (Humb. & Bonpl.) Standl.

Coffea obovata Cham. & Schltdl., Linnaea 6: 412. 1832. Type: MEXICO: Veracruz, in umbrosis prope Misantla, *Schiede & Deppe 1268* (Holotype presumably HAL, n.v.).—**Status uncertain,** probably **Hoffmannia** sp.

Coffea rosea Moç. & Sessé ex DC., Prodr. 4: 499. 1830. Type: MEXICO: Without precise locality, *Sessé & Moçiño s.n.* (presumably G-DC, n.v.; Fl. Mex. Ic. (G-DEL, n.v. (photo MO), calque 479 (US)).—**Status uncertain**, probably **Hoffmannia** sp.

Condalia Ruiz & Pav., Prodr. 11, *pl. 2.* 1794. Nomen rejic., not Condalia Cav. (1799) (Rhamnaceae). Type: Condalia repens Ruiz & Pav. [Herein treated as a synonym of *Coccocypselum* P. Browne.]

Condalia lanceolata Ruiz & Pav., Fl. Peruv. Chil. 1: 54. 1798. Type: PERU: In nemoribus Cuchero et Chinchao, *Ruiz Lopez & Pavón s.n.* (Holotype presumably MA, n.v.).—**Coccocypselum lanceolatum** (Ruiz & Pav.) Pers.

Condaminea DC., Prodr. 4: 402. 1830. Lectotype: Condaminea corymbosa (Ruiz & Pav.) DC.

Condaminea corymbosa (Ruiz & Pav.) DC., Prodr. 4: 402. 1830. *Macrocnemum corymbosum* Ruiz & Pav., Fl. Peruv. Prodr. 2: 48, *pl. 189.* 1799. Type: PERU: In Andium collibus et runcationibus calidis versus Chinchao, Acomayo, Pillao, Muña, *Ruiz Lopez & Pavón s.n.* (Holotype presumably MA, n.v.).

Condaminea petiolata Dwyer, Ann. Missouri Bot. Gard. 67: 117. 1980. Type: PANAMA: Panamá, Río Maje, near new Bayano Lake, <100 m, 5 May 1976, *T. B. Croat 34706* (Holotype MO 2398904 (photo PTBG); Isotype MO).—**Rondeletia panamensis** DC.

Cordiera A. Rich., Mém. Soc. Hist. Nat., Paris 5: 222, *t. 20*. 1830. (Herein considered as a synonym of *Alibertia* A. Rich.)

Cordiera edulis (Rich). Kuntze, Rev. Gen. Pl. 1: 279. 1891. *Genipa edulis* Rich., Act. Soc. Hist. Nat. Paris 1: 107. 1792. Type: FRENCH GUIANA: Guyane, without precise locality, *Richard s.n.* (Holotype P, n.v.; Isotype F 971706 (photo PTBG)).—**Alibertia edulis** (Rich.) A. Rich.

Cosmibuena Ruiz & Pav., Fl. Peruv. 3: 2. 1802, nom. cons. Type: Cosmibuena obtusifolia Ruiz & Pav., nom. illeg., type. cons. [= *Cosmibuena grandiflora* (Ruiz & Pav.) Rusby]. Not Cosmibuena Ruiz & Pav., 1794, nom. rej.

Cosmibuena grandiflora (Ruiz & Pav.) Rusby, Bull. New York Bot. Gard. 4: 368. 1907. *Cinchona grandiflora* Ruiz & Pav., Fl. Peruv. 2: 54, *pl. 89*. 1799. Type: PERU: Huánuco, Andes de Peru, ad Pozuzo et San Antonii de Playa grande, *Ruiz Lopez & Pavón s.n.* (Holotype presumably MA, n.v.; Isotype B, destroyed (photo F)).

Cosmibuena holdridgei Monach., Phytologia 3: 64. 1949. Type: GUATEMALA: Huehuetenango, Barillas to Tokija, Jul 1948, *L. R. Holdridge s.n.* (*Monachino 519*) (Holotype NY 3187, n.v. (photo NY); Isotype NY, n.v. (photo NY)).—**Cosmibuena matudae** (Standl.) L. O. Williams

Cosmibuena macrocarpa (Benth.) Klotzsch ex Walp., Repert. Bot. Syst. 6: 69. 1846. *Buena macrocarpa* Benth., Bot. Voy. Sulphur 104, *t. 38, f. 1–14*. 1845. Not *Buena macrocarpa* Wedd. 1869. Type: COLOMBIA: Nariño, Island of Gorgona, *Hinds 353* (Holotype K, n.v. (photo NY)).

Cosmibuena matudae (Standl.) L. O. Williams, Fieldiana, Bot. 31: 45. 1965. *Hillia matudae* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 51. 1940. Type: MEXICO: Chiapas, Volcán Tacaná, 2000–4039 m, Aug 1938, *E. Matuda 2327* (Holotype F 980255 (photo F); Isotypes A, n.v., NY, n.v., US (photos MEXU, PTBG)).

Cosmibuena ovalis Standl., Contr. U.S. Natl. Herb. 18: 137. 1916. Type: PANAMA: Coclé, vicinity of Olá, 100–350 m, 7–9 Dec 1911, *H. Pittier 5074* (Holotype US 715202 (photos F, MEXU, PTBG); Isotype NY, n.v.).—**Cosmibuena grandiflora** (Ruiz & Pav.) Rusby

Cosmibuena paludicola Standl., Contr. U.S. Natl. Herb. 18: 137. 1916. Type: PANAMA: Colón, vicinity of Viento Frío between Playa Damas and Viento Frío, along beach and near sea level, in mangrove formation, 7–8 Aug 1911, *H. Pittier 4107* (Holotype US 679204 (photos F, MEXU, PTBG); Isotypes GH, n.v., NY, n.v.).—**Cosmibuena macrocarpa** (Benth.) Klotzsch

Cosmibuena skinneri (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 12. 1881. *Buena skinneri* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren Kjobenhavn 1852: 48. 1853. Type: NICARAGUA: In monte ignivomo, Masaya, Jan 1848, *Oersted 11134* (Holotype C, n.v. (photos A, F, MO); Isotype US (photos MEXU, PTBG)).—**Cosmibuena grandiflora** (Ruiz & Pav.) Rusby

Cosmibuena valerii (Standl.) C. M. Taylor, Ann. Missouri Bot. Gard. 79: 897. 1992. *Hillia valerii* Standl., J. Wash. Acad. Sci. 18: 164. 1928. Type: COSTA RICA: San José, vicinity of La Palma, on the road to La Hondura, 1500–1700 m, 17–18 Jul 1923, *W. R. Maxon & A. D. Harvey 8092* (Holotype US 1181776 (photos F, MEXU, PTBG)).

Cosmocalyx Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 56. 1930. Type: Cosmocalyx spectabilis Standl.

Cosmocalyx spectabilis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 56. 1930. Type: MEXICO: Yucatán, without precise locality, 1917–1921, *G. F. Gaumer 24270* (Holotype F

552275 (photo PTBG), fragment US); Isotype MO (photo PTBG)).

Coussarea Aubl., Hist. Pl. Guiane 1: 98. 1775. Type: Coussarea violacea Aubl.

Coussarea austin-smithii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1286. 1938. Type: COSTA RICA: Region of Zarcero, 4700 ft., 25 Aug 1937, *A. Smith 4226* (Holotype F 905233 (photos MEXU, PTBG)).

Coussarea caroliana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 178. 1940. Type: COSTA RICA: Alajuela, Canton San Carlos, Suerre, 1000 m, 2 Mar 1939, *A. Smith H1645* (Holotype F 981032 (photo PTBG); Isotype US (photos MEXU, PTBG)).

Coussarea cerroazulensis Dwyer & Hayden, Ann. Missouri Bot. Gard. 53: 374. 1966. Type: PANAMA: Panamá, Cerro Azul, 600 m, 6 Aug 1961, *J. D. Dwyer 1368* (Holotype MO 1810161 (photos MEXU, PTBG)).

Coussarea chiriquiensis (Dwyer) C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 113. 1993. *Rudgea chiriquiensis* Dwyer, Ann. Missouri Bot. Gard. 67: 476. 1980. Type: PANAMA: Chiriquí, Cerro Colorado, along road above San Felix, 29 km above bridge over Río San Felix (7.9 km above turnoff to Escopeta), 1500 m, 14 Jul 1976, *T. B. Croat 37071* (Holotype MO 2798805 (photo PTBG); Isotype MO). —**Psychotria nebulosa** (Dwyer) C. M. Taylor

Coussarea colonis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 179. 1940. Type: PANAMA: Bocas del Toro, Buena Vista, region of Almirante, Jan–Mar 1928, *G. P. Cooper 228* (Holotype F 579282 (photo PTBG)). Nom. superfl. for *Coussarea euryphylla* Standl., 1929.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Coussarea curvigemma Dwyer, Phytologia 38: 215. 1978. Type: PANAMA: Barro Colorado Island, Wheeler Trail 850, 1 Jun 1971, *T. B. Croat 14863* (Holotype MO 2050013 (photo PTBG)).

Coussarea dariensis Steyerm., Ceiba 3: 20. 1952. Type: PANAMA: Darién, Río Chico, vicinity of Yaviza, 100 ft., 9–11 Jun 1947, *P. H. Allen 4576* (Holotype F 1397594 (photo PTBG); Isotypes MO, NY, n.v.).—**Coussarea paniculata** (Vahl) Standl.

Coussarea durifolia Dwyer, Ann. Missouri Bot. Gard. 67: 124. 1980. Type: PANAMA: Panamá, along El Llano-Cartí Tupile road, 12 miles above Panamerican Highway, 200–500 m, 26–27 Mar 1973, *R. Liesner 1180* (Holotype MO 2219526 (photo PTBG)).

Coussarea enneantha Standl., J. Wash. Acad. Sci. 18: 282. 1928. Type: PANAMA: Darién, Cana and vicinity, 2000–6500 ft., 17 Apr–8 Jun 1908, *R. S. Williams 841* (Holotype US 678317 (photos MEXU, PTBG)).

Coussarea euryphylla Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 4: 294. 1929. Type: PANAMA: Bocas del Toro, Buena Vista camp on Chiriquí trail, region of Almirante, Jan–Mar 1928, *G. P. Cooper 228* (Holotype F 579282). *Dukea, Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Coussarea garciae Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 180. 1940. Type: COLOMBIA: Chocó, Bahía Solano, along Quebrada Jellita, 50–100 m, 22 Feb 1939, *E. P. Killip & H. García 33524* (Holotype F 999258 (photo PTBG); Isotype US (photo PTBG)).

Coussarea hondensis (Standl.) C. M. Taylor & W. C. Burger, Selbyana 12: 138. 1991. *Psychotria hondensis* Standl., J. Wash. Acad. Sci. 18: 183. 1928. Type: COSTA RICA: Bois de Río Hondo, versant atlantique, 100 m, Aug 1901, *H. Pittier 16161* (Holotype US 764151 (photos MEXU, PTBG)).

Coussarea imitans L. O. Williams, Phytologia 26: 488, *fig.* 1973. Type: GUATEMALA: Izabal, along trail beginning from mile 33.23 between Dartmouth and Moralaes toward Lake Izabal, Montaña de Mico, 30–150 m, 7 Apr 1940, *J. A. Steyermark 39013* (Holotype F 1042963 (photos MEXU, PTBG)).

Coussarea impetiolaris Donn. Sm., Bot. Gaz. (Crawfordsville) 37: 418. 1904. COSTA RICA: La Colombiana, Llanuras de Santa Clara, 200 m, Jun 1899, *H. Pittier 7582*

(Holotype US 943498 (photos MEXU, PTBG); Isotype US 943497 (photos MEXU, PTBG)).

Coussarea jefensis Dwyer, Ann. Missouri Bot. Gard. 67: 128. 1980. Type: PANAMA: Panamá, Cerro Jefe, ca. 1000 m, 25 Aug 1975, *S. Mori & L. Joli 7927* (Holotype MO 2285634 (photo PTBG)).

Coussarea latifolia Standl., J. Wash. Acad. Sci. 18: 281. 1928. Type: COSTA RICA: Forêts de Tsâki, Talamanca, 200 m, Apr 1895, *A. Tonduz 9574* (Holotype US 938840 (photos MEXU, PTBG)).

Coussarea loftonii (Dwyer & Hayden) Dwyer, Ann. Missouri Bot. Gard. 67: 129. 1980. *Faramea loftonii* Dwyer & Hayden, Phytologia 15: 56. 1967. Type: PANAMA: Panamá, Cerro Jefe in *Clusia* forest at 2700–3000 ft., 27 Jan 1966, *E. L. Tyson, J. Dwyer & K. Blum 3323* (Holotype MO 1824505 (photo PTBG); Isotype MO (photo PTBG)).

Coussarea mediocris Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 248. 1947. Type: GUATEMALA: Huehuetenango, Sierra de los Cuchumatanes, vicinity of Maxbal, about 17 miles north of Barillas, 1500 m, 15–26 Jul 1942, *J. A. Steyermark 48732* (Holotype F 1134264 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Coussarea mexicana Standl., Publ. Field Mus. Nat. Hist, Bot. Ser. 17: 274. 1937. Type: MEXICO: Oaxaca, Ubero, 30–60 m, Jun 1937, *L. Williams 9442* (Holotype F 897721 (photos MEXU, PTBG); Isotypes P (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Coussarea morii Dwyer, Ann. Missouri Bot. Gard. 67: 130. 1980. Type: PANAMA: Darién, Río Tuquesa, at middle Tuquesa Mining Company Camp called Charco Peje, tropical wet forest, 250 m, 8 Jul 1975, *S. Mori 7058* (Holotype MO 2821790 (photo PTBG)).

Coussarea nebulosa Dwyer, Ann. Missouri Bot. Gard. 67: 131. 1980. Type: PANAMA: Chiriquí, uncut cloud forest at Monte Rey near Boquete, 20 Jul 1971, *T. B. Croat 15868* (Holotype MO 2162995 (photo PTBG); Isotype MO 4043108 (photo PTBG)). —**Psychotria nebulosa** (Dwyer) C. M. Taylor

Coussarea neei Dwyer, Ann. Missouri Bot. Gard. 67: 132. 1980. Type: PANAMA: Veraguas, 6–7 km W of Santa Fé on new road past agriculture school, 2900 ft., 17 Feb 1974, *M. Nee 9820* (Holotype MO 2241791 (photo PTBG); Isotype MO 2241792 (photo PTBG)).

Coussarea nigrescens C. M. Taylor & Hammel, Selbyana 12: 135, *fig. 1*. 1991. Type: COSTA RICA: Heredia, Finca La Selva, the OTS field station near Puerto Viejo de Sarapiquí, near the junction of the Ríos Puerto Viejo and Sarapiquí, 100 m, 5 Nov 1980, *B. Hammel 10383* (Holotype DUKE, n.v.).

Coussarea paniculata Standl., J. Wash. Acad. Sci. 18: 282. 1928, based on *Froelichia paniculata* Vahl, Eclog. Amer. 1: 3. 1796. Not *Froelichia paniculata* Moench., 1794. Type: TRINIDAD: *Ryan s.n.* (C, n.v.).

Coussarea psychotrioides C. M. Taylor & Hammel, Selbyana 12: 135, *fig. 2*. 1991. Type: COSTA RICA: Heredia, Finca La Selva, the OTS field station near Puerto Viejo de Sarapiquí, near the junction of the Ríos Puerto Viejo and Sarapiquí, 100 m, 12 Jul 1979, *J. H. Beach 1467* (Holotype DUKE, n.v.; Isotypes CR, n.v., F, MO).

Coussarea roseocremea Dwyer, Ann. Missouri Bot. Gard. 67: 133. 1980. Type: PANAMA: Panamá, El Llano-Cartí Highway, 6–10 km north of El Llano, 13 Apr 1973, *R. L. Dressler 4334* (Holotype MO 2126258 (photo PTBG)). —**Psychotria roseocrema** (Dwyer) C. M. Taylor

Coussarea talamancana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1288. 1938. Type: COSTA RICA: Talamanca Valley, Jun 1927, *G. P. Cooper T4* (Holotype F 572698 (photo PTBG)).

Coussarea veraguensis Dwyer, Ann. Missouri Bot. Gard. 67: 134. 1980. Type: PANAMA: Veraguas, NW of Santa Fé, 1 km from Escuela Agrícola Alto de Piedra, on the slopes of Cerro Tute, *S. Mori & J. Kallunki 4800* (Holotype MO 2276605; Isotype MO 2276606).—**Coussarea caroliana** Standl.

Coussarea villosula Dwyer, Ann. Missouri Bot. Gard. 53: 105. 1966. Type: PANAMA: Darién, Cerro Pirre, from Río Pirre S to El Real, 750–1030 ft., *J. A. Duke 5338* (Holotype MO).

Coutaportla Urb., Symb. Antill. 9: 146. 1923. Type: Coutaportla ghiesbreghtiana (Baill.) Urb.

Coutaportla ghiesbreghtiana (Baill.) Urb., Symb. Antill. 9: 147. 1923. *Portlandia ghiesbreghtiana* Baill., Adansonia 12: 300. 1879. Type: MEXICO: Oaxaca, près de Hacienda de Huijastla, au bord des ravins, 1842–43, *Ghiesbreght 27* (Holotype P (photos MEXU, PTBG); Isotypes P, 3 sheets (photos MEXU), US (photos MEXU, PTBG)).

Coutaportla guatemalensis (Standl.) Lorence, Syst. Bot. 11: 210. 1986. *Portlandia guatemalensis* Standl., J. Wash. Acad. 18: 162. 1928. Type: GUATEMALA: Alta Verapaz, Quebradas Secas, 2500 ft., 1 Jun 1920, *H. Johnson 282* (Holotype US 1081354 (photos MEXU, PTBG), fragment F).

Coutaportla pailensis Villarreal, Sida 12: 223, *fig. 1*. 1987. Type: MEXICO: Coahuila, Mun. Ramos Arizpe, Sierra de la Paila, Cañon de Loma Prieta, al NW de Hipólito, 1800 m, *J. A. Villarreal et al. 3305* (Holotype MEXU, n.v.; Isotypes ANSM (n.v.), ENCB, n.v., TEX, n.v.).

Coutarea Aubl., Hist. Pl. Guiane 1: 314. 1775. Type: Coutarea speciosa Aubl.

Coutarea acamptoclada B. L. Rob. & Millsp., Engl. Bot. Jahrb. 36: Beibl. 80: 28. 1905. Type: MEXICO: Yucatán, im Walde bei Umán, 7 Apr 1903, *C. Seler & E. Seler 4044* (Holotype F (photo PTBG); Isotype B, presumably destroyed).—**Hintonia octomera** (Hemsl.) Bullock

Coutarea flavescens Moç. & Sessé ex DC., Prodr. 4: 350. 1830. Type: MEXICO: Without precise locality, *Sessé & Moçiño s.n.* (Fl. Mexic. Ic. G-DC, n.v, (photo MO)). —**Coutarea hexandra** (Jacq.) K. Schum.

Coutarea hexandra (Jacq.) K. Schum. in Mart. Fl. Bras. 6(6): 196. 1889. *Portlandia hexandra* Jacq., Enum. Pl. Carib. 16. 1760. Type: COLOMBIA: Cartagena in fruticosis, *Jacquin s.n.* (Holotype presumably C, n.v.).

Coutarea latiflora Sessé & Moç. ex DC., Prodr. 4: 350. 1830. Type: MEXICO: Based on an unpublished illustration [calque] (Fl. Mexic. Ic. G-DC (photo MO)).—**Hintonia latiflora** (Sessé & Moç. ex DC.) Bullock

Coutarea lumaeana Baill., Adansonia 12: 301. 1879. Type: GUATEMALA: Chimalatenango, San Jorge, 900 m, *Luma s.n.* (Holotype P (photos MEXU, MO, PTBG)). *Portlandia*.—**Hintonia lumaeana** (Baill.) Bullock

Coutarea mexicana Zucc. & Mart. ex DC., Prodr. 4: 350. 1830. Type: MEXICO: Without precise locality, *Martius s.n.* in 1829 (Holotype G-DC, n.v. (microfiche IDC 800. 680: II.7)). *Cigarilla, Portlandia*.—**Nernstia mexicana** (Zucc. & Mart. ex DC.) Urb.

Coutarea octomera Hemsl., Biol. Centr.-Amer., Bot. 4: 101. 1887. Type: MEXICO: Yucatán, Cozumel Island, Apr 1895, *G. F. Gaumer 148* (Holotype K, n.v.).—**Hintonia octomera** (Hemsl.) Bullock

Coutarea pterosperma (S. Watson) Standl., N. Amer. Fl. 32: 127. 1921. *Portlandia pterosperma* S. Watson, Proc. Amer. Acad. Arts 24: 52. 1889. Type: MEXICO: Sonora, Guaymas, 1887, *E. Palmer 298* (Holotype US 47978 (photos MEXU, PTBG); Isotype US 47979 (photos MEXU, PTBG)).—**Hintonia latiflora** (Sessé & Moçino ex DC.) Bullock

Coutarea speciosa Aubl., Hist. Pl. Guiane 1: 314, *t. 122*. 1775. Type: FRENCH GUIANA: *Aublet s.n.* (presumably P, n.v.). *Portlandia*. —**Coutarea hexandra** (Jacq.) K. Schum.

Crucianella L., Syst. Pl. 108. 1753. Lectotype: Crucianella latifolia L.

Crucianella americana Mill., Gard. Dict., ed. 8, no. 5. 1768. Type: MEXICO: Veracruz, *Miller s.n.* (Holotype BM, n.v.).—**Status uncertain**, probably **Spermacoce** sp.

Crucianella hispida Mill., Gard. Dict., ed. 8, no. 4. 1768. Type: MEXICO: Veracruz, *Miller s.n.* (Holotype BM, n.v. (photo US)). —**Crusea hispida** (Mill.) B. L. Rob.

Crusea Schltdl. & Cham., Linnaea 5: 165. Jan 1830. Not Crusea A. Rich., Dec 1830. Lectotype: Crusea hispida (Mill.) B. L. Rob. (Lectotype designated by Schumann, 1891: 141).

Crusea allococca Torr. & A. Gray, Proc. Amer. Acad. Arts 19: 78. 1883, nom. superfl. illeg., based on *Diodia tricocca* A. Gray (See Anderson, 1972: 116 for discussion.). —**Richardia tricocca** (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv.

Crusea andersoniorum Lorence, Novon 7: 57, *fig. 6*. 1997. Type: MEXICO: Oaxaca, Distr. de Miahuatlán, crest of ridge and steep SW facing slope 90–100 km SE of Sola de Vega along road to Puerto Escondido, 1830 m, 25 Oct 1984, *D. E. Breedlove 62063* (Holotype CAS 727669 (photo PTBG)).

Crusea aspera Bartl., Ind. Sem. Hort. Gotting 1838. Type: Probably MEXICO: Herb. Fischer, a garden specimen grown during Bartling's tenure (Lectotype GOET, n.v.; designated by Anderson, 1972: 111). —**Crusea hispida** (Mill.) B. L. Rob. var. **hispida**

Crusea brachyphylla Schltdl. & Cham., Linnaea 5: 165. 1830. Type: MEXICO: Veracruz: Serro [Cerro] Colorado, Aug 1828, *Schiede & Deppe 524b* (Holotype presumably HAL, n.v.; Isotype LE, n.v., fragment F).—**Crusea longiflora** (Willd. ex Roem. & Schultes) W. R. Anderson

Crusea brachyphylla Schltdl. & Cham. f. *microcephala* Loes., Verh. Bot. Vereins Prov. Brandenburg 65: 115. 1923. Type: MEXICO: Michoacán, Patzcuaro, Monte Calvario, 1 Nov 1895, *E. Seler & C. Seler 1211* (Holotype B, presumably destroyed; Isotype GH, n.v.). —**Crusea longiflora** (Willd. ex Roem. & Schultes) W. R. Anderson

Crusea calicola Greenm., Proc. Amer. Acad. Arts 32: 305. 1897. Type: MEXICO: Oaxaca, dry calcareous hills, Las Sedas, 6000 ft., 8 Sep 1894, *C. G. Pringle 4869* (Holotype GH, n.v.; Isotypes BM, n.v., BR, n.v., F, MICH, n.v., MO (photos MEXU, PTBG), NY, n.v., UC (photo PTBG), US (photos MEXU, PTBG)).

Crusea calocephala DC., Prodr. 4: 567. 1830. Type: MEXICO: Without precise locality, "*Pavón*" [*Sessé, Mociño et al.*], (Presumably Herb. Dunat, location unknown (n.v.), fragment P, n.v.; Isotype P, n.v.; see Anderson, 1972: 97).

Crusea chiapensis Brandegee, Univ. Calif. Publ. Bot. 6: 374. 1917. Type: MEXICO: Chiapas, *C. A. Purpus 7526* (Holotype UC, n.v.). —**Crusea longiflora** (Willd. ex Roem. & Schultes) W. R. Anderson

Crusea coccinea DC., Prodr. 4: 567. 1830. Type: MEXICO: Nova Hispaña, without precise locality, "*Pavón 588*" [=*Sessé, Mociño et al. 588*] (Lectotype MA (n.v.), fragment G-DC, n.v.; Isolectotype F 850991 (photo PTBG); designated by Anderson, 1972: 39).

Crusea coccinea DC. var. **breviloba** Loes., Verh. Bot. Vereins Prov. Brandenburg 65: 115. 1923. Type: GUATEMALA: Huehuetenagno, Jacaltenango, San Martín, 9 Sep 1896, *E. Seler & C. Seler 3113* (Holotype B, presumably destroyed; Isotype GH, n.v.)

Crusea coccinea DC. var. **chiriquensis** W. R. Anderson, Mem. New York Bot. Gard. 22: 45. 1972. Type: PANAMA: Chiriquí, Casita Alta to Cerro Copete, 2300–3300 m, 10 Jul 1040, *Woodson & Schery 358* (Holotype F 1089337 (photo PTBG); Isotypes GH, n.v., MO).

Crusea coccinea DC. var. *pubescens* Greenm., Proc. Amer. Acad. Arts 32: 306. 1897. Type: MEXICO: Oaxaca: NW slope of Mt. Zempoaltepec, 8000–10000 ft., 10 Jul 1894, *E. W. Nelson 699* (Lectotype GH, n.v.; Isolectotype US (photo PTBG); designated by Anderson, 1972: 39).—**Crusea coccinea** DC. var. **coccinea**

Crusea coronata B. L. Rob. & Greenm., Proc. Amer. Acad. Arts 29: 387. 1894. Type: MEXICO: Jalisco, Tequila, 3 Oct 1893, *C. G. Pringle 5424* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).

Crusea cruciata S. Watson, Proc. Amer. Acad. Arts 25: 152. 1890. Type: MEXICO: Jalisco, barranca near Guadalajara, 19 Oct 1889, *C. G. Pringle 2969* (Holotype GH, n.v.; Isotype F)). —**Crusea setosa** (M. Martens & Galeotti) Standl. & Steyerm.

Crusea cruciata S. Watson var. *villosior* Greenm., Proc. Amer. Acad. Arts 32: 306. 1897. Type: MEXICO: Jalisco, Guadalajara, Jul–Oct 1886, *E. Palmer 901* (Lectotype GH, n.v.; Isolectotype US; designated by Anderson, 1972: 83).—**Crusea setosa** (M. Martens & Galeotti) Standl. & Steyerm.

Crusea diversifolia (Kunth) W. R. Anderson, Mem. New York Bot. Gard. 22: 58. 1972. *Spermacoce diversifolia* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 341. 1818 [1819]. Type: MEXICO: Guanajuato, Santa Rosa de la Sierra, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photos F, MO)).

Crusea elata Brandegee, Univ. Calif. Publ. Bot. 6: 68. 1914. Type: MEXICO: Chiapas, Sierra de Tonalá, Sep 1913, *C. A. Purpus 6640* (Holotype UC 172353 (n.v.); Isotypes BM, n.v., F, GH, n.v., NY, n.v., US (photos MEXU, PTBG)). Listed in synonymy under *Crusea calocephala* by Anderson (1972), but it actually represents a valid species (W. R. Anderson, pers. comm. 1984).

Crusea gentryi Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 112. 1940. Type: MEXICO: Sonora: Alamos Distr., Quirocoba, 12 Nov 1923, *H. S. Gentry 766M* (Holotype F 968108 (photo PTBG); Isotype MICH, n.v.).—**Crusea lucida** Benth.

Crusea grandiflora Paul G. Wilson, Kew Bull. 13: 161. 1958. Type: MEXICO: México, Distr. Temascaltepec, Tenayac, 1540 m, 28 Sep 1933, *G. B. Hinton 4848* (Lectotype K, n.v.; designated by Anderson, 1972).—**Crusea hispida** (Mill.) B. L. Rob. var. **grandiflora**

Crusea guatemalensis Gand., Bull. Soc. Bot. France 65: 34. 1918. Type: GUATEMALA: Alta Verapaz, *H. von Tuerckheim s.n.* (Holotype presumably P, n.v.).—**Crusea calocephala** DC.

Crusea hispida (Mill.) B. L. Rob., Proc. Amer. Acad. Arts 45: 409. 1910. var. **hispida**. *Crucianella hispida* Mill., Gard. Dict., ed. 8, no. 4. 1768. Type: MEXICO: Veracruz, grown at Chelsea from seed sent by Houstoun, *Miller s.n.* (Holotype BM, n.v. (photo US)).

Crusea hispida (Mill.) B. L. Rob. var. **grandiflora** (Paul G. Wilson) W. R. Anderson, Mem. New York Bot. Gard. 22: 115. 1972. *Crusea grandiflora* Paul G. Wilson, Kew. Bull. 13: 161. 1958. Type: MEXICO: México, *G. B. Hinton 4848* (Holotype K, n.v.).

Crusea hispidula Bartl., Ind. Sem. Hort. Gotting. 1839: 3. 1839. Type: Herb. Fischer, a garden specimen grown during Bartling's tenure (Holotype GOET (n.v.)).—**Crusea calocephala** DC.

Crusea longibracteata Benth. in Oerst., Vidensk. Meddel. Dansk. Naturhist. Foren. Kjoebenhavn 1852: 28. 1853. Type: NICARAGUA: Granada, Jun 1846, *Oersted s.n.* (Holotype, K, n.v.; Isotype US)). —**Crusea setosa** (M. Martens & Galeotti) Standl. & Steyerm.

Crusea longiflora (Willd. ex Roem. & Schultes) W. R. Anderson, Mem. New York Bot. Gard. 22: 89. 1972. *Spermacoce longiflora* Willd. ex Roem. & Schultes, Syst. Veg. 3: 531. 1818. Type: MEXICO: Michoacán, near Ario [de Rosales], and Mexico City, *Humboldt & Bonpland s.n.* (Holotype B-W, n.v.).

Crusea lucida Benth., Bot. Voy. Sulphur 109. 1845. Type: MEXICO: Without precise locality, southern Mexico, *Sinclair s.n.* (Holotype K, n.v. (photo MICH)).

Crusea megalocarpa (A. Gray) S. Watson, Proc. Amer. Acad. Arts 26: 137. 1891. *Spermacoce megalocarpa* A. Gray, Proc. Amer. Acad. Arts 21: 381. 1886. Type: MEXICO: Chihuahua, southwestern Chihuahua, wet places in the higher mountains above Batopilas, Aug–Nov 1885, *E. Palmer 185* (Holotype GH, n.v.; Isotypes NY, n.v., US (photos MEXU, PTBG)).

Crusea palmeri A. Gray, Proc. Amer. Acad. Arts 21: 381. 1886. Type: MEXICO: Chihuahua, southwestern Chihuahua, 25 miles S of Batopilas, Aug–Sep 1885, *E. Palmer 70* (Holotype GH, n.v.; Isotypes BM, n.v., MEXU, NY, n.v., US (photos MEXU, PTBG)).—**Crusea psyllioides** (Kunth) W. R. Anderson

Crusea parviflora Hook. & Arn., Bot. Beechey Voy. 430, *pl. 99c*. 1840 (text), 1841 (plate). Type: MEXICO: Guerrero, Acapulco, *Sinclair s.n.* (Holotype K, n.v.).

Crusea psyllioides (Kunth) W. R. Anderson, Mem. New York Bot. Gard. 22: 75. 1972. *Spermacoce psyllioides* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 346, *pl. 278*. 1818 [1819]. Type: MEXICO: Michoacán, near Ario [de Rosales], *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MICH)).

Crusea rosea Loes., Repert. Spec. Nov. Regni Veg. 18: 362. 1922. Type: MEXICO: Morelos: barranca bei Cuernava [Cuernavaca], 14 Oct 1904, *E. Seler & C. Seler 4181* (Lectotype GH, n.v.; designated by Anderson, 1972: 111).—**Crusea hispida** (Mill.) B. L. Rob. var. **hispida**

Crusea rubra (Jacq.) Schltdl. & Cham., Linnaea 5: 165. 1830. *Spermacoce rubra* Jacq., Pl. Rar. Hort. Schoenbr. 3: 3, *pl. 256*. 1798. Type: Unknown (see Anderson, 1972: 110).—**Crusea hispida** (Mill.) B. L. Rob. var. **hispida**

Crusea setosa (M. Martens & Galeotti) Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 22. 1943. *Borreria setosa* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 131. 1844. Type: MEXICO: Oaxaca, dans les forêts de palmiers et sur les dunes de la côte d'Oaxaca, baignée par l'Océan Pacifique, près du Rancho du Rio Grande, Sep 1839, *H. Galeotti 2627* (Holotype BR, n.v.; Isotype P, n.v.).

Crusea subalata Hook. & Arn., Bot. Beechey Voy. 431. 1840. Type: MEXICO: Nayarit, between San Blas and Tepic, *Sinclair s.n.* (Holotype K, n.v.).—**Crusea parviflora** Hook. & Arn.

Crusea subulata (DC.) A. Gray, Proc. Amer. Acad. Arts 19: 78. 1883. *Borreria subulata* DC., Prodr. 4: 543. 1830. Type: MEXICO: Without precise locality, *Berlandier 826* (Lectotype [annotated by de Candolle but not cited in protologue, according to Anderson, 1972: 58] G, n.v. (photo F); Isolectotype BM, n.v.).—**Crusea diversifolia** (Kunth) W. R. Anderson

Crusea subulata (DC.) A. Gray var. *leiocarpa* Greenm., Proc. Amer. Acad. Arts 40: 33. 1904. Type: MEXICO: San Luis Potosí, Alvarez, 28 Sep–3 Oct 1902, *E. Palmer 147* (Holotype GH, n.v.); Isotypes F, MO (photos MEXU, PTBG), NY, n.v., US (photos MEXU, PTBG)).—**Crusea diversifolia** (Kunth) W. R. Anderson

Crusea tricocca (Torr. & A. Gray) A. Heller, Contr. Herb. Franklin & Marshall College 1: 97. 1895. *Diodia tricocca* Torr. & A. Gray, Fl. N. Amer. 2: 30. 1841. Type: U.S.A.: Texas, *Drummond 117* (Holotype F; Isotype G, n.v.).—**Richardia tricocca** (Torr. & A. Gray) Loes. subsp. **tricocca**

Crusea villosa S. Watson, Proc. Amer. Acad. Arts 25: 152. 1890. Type: MEXICO: Jalisco, rocky hillsides near Guadalajara, 9 Oct 1889, *C. G. Pringle 2448* (Holotype GH, n.v.; Isotypes BM, n.v., MEXU, MO (photos MEXU, PTBG), NY, n.v., US (photos MEXU, PTBG)).—**Crusea psyllioides** (Kunth) W. R. Anderson

Crusea violacea Brongn. ex Neumann, Rev. Hort. II. 4: 368. 1846; 5: 61. 1846. Type: Unknown (see Anderson, 1972: 97).—**Crusea calocephala** DC.

Crusea wrightii A. Gray, Pl. Wright. 2: 68. 1853. Type: MEXICO: Sonora, prairies near Santa Cruz, Sep 1851, *C. Wright 1121* (Holotype GH, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)).

Crusea wrightii A. Gray var. **angustifolia** W. R. Anderson, Mem. New York Bot. Gard. 22: 108. 1972. Type: MEXICO: Guerrero, 6.3 miles east of Chilpancingo on road to Tixtla, at km 12, 1600 m, *W. R. Anderson & C. W. Laskowski 4334* (Holotype MICH, n.v.; Isotype MO (photos MEXU, PTBG)).

Dasycephala DC., Prodr. 4: 565. 1830. (Diodiae sect. 2). Type: Not designated.

Dasycephala spicata (Miq.) Benth. in Benth. & Hook. f., Gen. Pl. 2: 144. 1873. *Diodia spicata* Miq., Stirp. Surin. Sel. 179, *pl. 52*. 1851. Type: SURINAM: Sylvarum prope

Bergendaal, Oct, *Focke s.n.* (presumably U, n.v.; this is Miquel's lectotype according to Howard, 1989).—**Diodia spicata** Miq.

Declieuxia Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 352, *pl. 281*. 1818. Type: Declieuxia fruticosa (Willd. ex Roem. & Schult.) Kuntze.

Declieuxia fruticosa (Willd. ex Roem. & Schult.) Kuntze, Rev. Gen. 1: 279. 1891. *Houstonia fruticosa* Willd. ex Roem. & Schult., Syst. Veg. 3: 527. 1818. Type: VENEZUELA: Monagas, Caripe, *Humboldt s.n.* (presumably B-W, n.v.).

Declieuxia fruticosa (Willd. ex Roem. & Schult.) Kuntze var. *mexicana* (DC.) Standl., Field Mus. Nat. Hist., Bot. Ser. 12: 378. 1936. *Declieuxia mexicana* DC., Prodr. 4: 479. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Declieuxia fruticosa** (Willd. ex Roem. & Schult.) Kuntze

Declieuxia galeottii M. Martens in M. Martens & Galeotti, Bull. Acad. Roy. Soc. Bruxelles 11: 231. 1844. Type: MEXICO: Oaxaca, Llano Verde, 3000–7000 ft., Apr 1840, *H. Galeotti 2603* (Holotype BR (photo PTBG); Isotypes BR, n.v., F (photos PTBG), US).—**Hedyotis galeottii** (M. Martens) Terrell & Lorence

Declieuxia mexicana DC., Prodr. 4: 479. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Declieuxia fruticosa** (Willd. ex Roem. & Schult.) Kuntze

Dentella J. R. & G. Forst., Char. Gen. Pl. 25, *t. 13*. 1776. Type: Dentella repens (L.) J. R. & G. Forst.

Dentella repens (L.) J. R. & G. Forst., Char. Gen. Pl. 26. 1776. *Oldenlandia repens* L., Mant. 40. 1767. Type: INDIA: (Lectotype LINN 155/2, n.v.; designated by Verdcourt, 1983). Naturalized in Mexico at least in Colima and Guerrero; native to Australasia.

Deppea Cham. & Schltdl., Linnaea 5: 167. 1830. Type: Deppea erythrorhiza Cham. & Schltdl.

Deppea amaranthina Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22; 281. 1940. Type: GUATEMALA: Chiquimula, Cerro Brujo, in vicinity of Río Negro, below Montaña Montenegro, near village of Brujo, 1500–2000 m, 1 Nov 1939, *J. A. Steyermark 30926* (Holotype F 1035809 (photos F, MEXU, PTBG)).

Deppea anisophylla L. O. Williams, Phytologia 26: 490. 1973. Type: GUATEMALA: Suchitepequez, Finca Moca, 1000 m, 7 Jan 1935, *A. F. Skutch 2072* (Holotype F 815818 (photos MEXU, PTBG); Isotype US).

Deppea cornifolia (Benth.) Benth., Pl. Hartw. 349. 1857. *Rondeletia cornifolia* Benth., Pl. Hartw. 39. 1840. Type: MEXICO: Michoacán, prope Morelia, *T. Hartweg 299* (Holotype K (photo MEXU); Isotypes BM, G-DEL, n.v., fragment F, P (photos MEXU, PTBG, US), US, fragment (photos MEXU, PTBG), W, 2 sheets (photos PTBG)). *Choristes*.

Deppea costaricensis Pol., Linnaea 41: 566. 1877. Type: COSTA RICA: Desengaño, prope Alajuela, 27 Jun 1875, *H. Polakowski 148* (Holotype B, presumably destroyed (photos F, MEXU, US); Isotypes BM, W (photo PTBG), fragment F).—**Deppea grandiflora** Schltdl.

Deppea ehrenbergii Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 161. 1930. Type: MEXICO: Without precise locality, *C. Ehrenberg 1318* (Holotype B, presumably destroyed (fragment F (photos MEXU, PTBG)).

Deppea erythrorhiza Cham. & Schltdl., Linnaea 5: 168. 1830 (Jan 1830). Type: MEXICO: Veracruz, in umbrosis prope Hacienda de la Laguna, Aug 1829, *C. J. W. Schiede & F. Deppe 388* (Holotype HAL (photo PTBG); Isotype HAL (photo PTBG)).

Deppea excelsa (Kunth) Standl., N. Amer. Fl. 32: 89. 1921. *Psychotria* (?) *excelsa* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 355, *t. 282*. 1819. Type: MEXICO: Veracruz,

Xalapa, *A. Bonpland 1445* (Holotype presumably P-Bonpland, n.v.; Isotypes B (photo MO), P (photos MEXU, PTBG)). —**Hoffmannia excelsa** (Kunth) K. Schum.

Deppea flava (Brandegee) L. O. Williams, Fieldiana, Bot. 24(11): 58. 1975. *Plocaniophyllon flavum* Brandegee, Univ. Calif. Publ. Bot. 6: 69. 1914. Type: MEXICO: Chiapas, Finca Mexiquito, Jun 1913, *C. A. Purpus 7019* (Holotype UC 173077, n.v.; Isotypes F (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Plocaniophyllon flavum** Brandegee

Deppea floribunda Hemsl., Diagn. Pl. Nov. Mexic. 31. 1879. Type: MEXICO: Veracruz, Orizaba, *Botteri 937* (Lectotype P (photos MEXU, PTBG, US); Isolectotypes BM, F, fragment, P (photos MEXU, PTBG), W (photo PTBG); designated by Lorence & Dwyer, 1988).—**Deppea grandiflora** Schltdl.

Deppea grandiflora Schltdl., Linnaea 19: 748. 1847. Type: MEXICO: Without precise locality, Temperirites (presumably Veracruz), *Leibold 235, 253, 263* (Syntypes HAL (photos PTBG); a lectotype cannot be selected with certainty; for discussion see Lorence & Dwyer, 1988).

Deppea guerrerensis Dwyer & Lorence, Allertonia 4: 428, *fig. 4a–c*. 1988. Type: MEXICO: Guerrero, vicinity of Omiltemi, 20 miles west of Chilpancingo on logging road, 2500–2700 m, 31 Jul 1957, *R. M. Straw & D. P. Gregory 1081* (Holotype MEXU; Isotype ENCB).

Deppea hamelioides Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 269. 1929. Type: MEXICO: Jalisco, San Sebastian, Segundo Arroyo, Sierra Madre Mountains, 1500 m, 22 Jan 1927, *Y. Mexia 1546a* (Holotype F 579899 (photo PTBG); Isotypes A, n.v., BM, US (photos F, MEXU, PTBG)).

Deppea hedyotidea DC., Prodr. 4: 618. 1830 (Sep 1830), nom. superfl., based on the type of *D. erythrorhiza* Cham. & Schltdl. —**Deppea erythrorhiza** Cham. & Schltdl.

Deppea hernandezii Lorence, Allertonia 4: 405, *fig. 4d–g*. 1988. Type: MEXICO: Hidalgo, Mun. de Tenango de Doria, a 6 km al este de Tenango de Doria hacia al Cirio, 1700–1800 m, 19 Feb 1981, *R. Hernandez M. & D. Rodríguez 5466* (Holotype MEXU; Isotypes MO (photo PTBG), XAL).

Deppea hintonii Bullock, Kew Bull. 5: 309. 1937 [as D. hintoni]. Type: MEXICO: México, Distr. of Temascaltepec, Tejupilco, barranca, 1340 m, 22 Sep 1933, *G. B. Hinton 4824* (Holotype K (photo PTBG); Isotypes BM, F (photo PTBG), MO (photo PTBG), US).

Deppea inaequalis Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 384. 1940. Type: GUATEMALA: San Marcos, above Finca el Porvenir along Río Cabus to within 2 miles of Cueva de las Palomas, south-facing slopes of Volcán Tajumulco, 1300–1500 m, 16 Mar 1940, *J. A. Steyermark 37974* (Holotype F 1043181 (photos F, PTBG)).

Deppea longipes Standl., Contr. U.S. Natl. Herb. 18: 138. 1916. Type: PANAMA: Chiriquí, east slopes of Chiriquí Volcano, Camp Aguacatl, 2100–2200 m, 10–13 Mar 1911, *H. Pittier 3070* (Holotype US 677458 (photos MEXU, PTBG, US)).—**Deppea grandiflora** Schltdl.

Deppea lundellii Dwyer, Phytologia 54: 277. 1983. Type: GUATEMALA: Baja Verapaz, Niño Perdido, bordering Río San José, *C. L. Lundell & E. Contreras 21025* (Holotype TEX-LL; Isotypes MEXU, MO (photo PTBG)). In the protologue Dwyer states "(LL; holotype, MO)." This is probably a typographical error, as the MO specimen was annoted by Dwyer as isotype, and the specimen at TEX-LL is presumably the holotype.—**Pinarophyllon bullatum** Standl.

Deppea macrocarpa Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 268. 1929. Type: MEXICO: Nayarit, Cerro de San Juan, west of Tepic, 1000 m, 19 Sep 1926, *Y. Mexia 727* (Holotype F 579908 (photos MEXU, PTBG); Isotypes GH, n.v., MO, US, 2 sheets (photos PTBG)).—**Rondeletia jurgensenii** Hemsl.

Deppea martinez-calderonii Lorence, Allertonia 4: 399, *figs. 1e, 2*. 1988. Type: MEXICO: Oaxaca, Distr. de Ixtlán, Sierra de

Juárez, Ruta 175 a 2.5 km al norte de Puerto Eligio, 780 m, 4 Ago 1985, *D. Lorence et al. 4714* (Holotype MEXU; Isotypes ENCB, MEXU, MO, UC, W, XAL).

Deppea miahuatlanica Lorence, Novon 7: 48, *fig. 2*. 1997. Type: MEXICO: Oaxaca, Distr. de Miahuatlán, Mun. de San Jéronimo Coatlán, 17.9 km al SW de San Jéronimo Coatlán, carretera Miahuatlán–Piedra Larga, 1800 m, 16°12'N, 96°57'W, 13 Dec 1987, *R. Torres C. & A. Campos 10847* (Holotype PTBG 15197; Isotype MEXU).

Deppea microphylla Greenm., Proc. Amer. Acad. Arts 41: 249. 1905. Type: MEXICO: Hidalgo, river bluffs below the Trinidad Iron Works, 5700 ft., 26 Apr 1904, *C. G. Pringle 8907* (Holotype GH (n.v.); Isotypes F (photos MEXU, PTBG), MEXU, MO, P (photos MEXU, PTBG), US, 2 sheets (photos MEXU, PTBG), W (photo PTBG)).

Deppea oaxacana Lorence, Allertonia 4: 419, *fig. 5*. 1988. Type: MEXICO: Oaxaca, Distr. de Mixe, a 9 km de la entrada a Villa Alta, este entronque a 10 km al suroeste de Totontepec, 2230 m, 13 Dic 1985, *R. Torres C. & C. Martínez 7956* (Holotype MEXU; Isotypes BM, ENCB, F, MEXU, MO, UC, W, XAL).

Deppea obtusiflora (Benth.) Benth., Pl. Hartweg. 349. 1857. *Choristes obtusiflora* Benth., Pl. Hartw. 63. 1840. Type: MEXICO: Oaxaca, in planitie Llano Verde, *T. Hartweg 473* (Holotype K (photo PTBG); Isotypes F (fragment from P), P (photos F, MEXU, PTBG, US), W, 2 sheets (photos PTBG)).

Deppea panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 145. 1980. Type: PANAMA: Panamá, 5–10 km northeast of Altos de Pacora, ca. 750 m, 7 Mar 1975, *S. Mori & J. Kallunki 4965* (Holotype MO 2257147; Isotypes MO, 2 sheets).—**Elaeagia myriantha** (Standl.) C. M. Taylor & Hammel

Deppea pubescens Hemsl., Diagn. Pl. Nov. Mexic. 31. 1879; Biol. Centr.-Amer., Bot. 2: 27. 1881. Type: MEXICO: México, Santa Gertrudis, *F. Liebmann 65* (=*Plantae Mexicanae Liebmann 11382*) (Holotype K (photo PTBG), fragment F); Isotypes GH, n.v., MO, P (photos F, MEXU, PTBG, US), US (photos MEXU, PTBG)).

Deppea purpurascens Lorence, Allertonia 4: 402, *fig. 3*. 1988. Type: MEXICO: Veracruz, Mun. de Soteapan, Cumbres de Bastonal, ca. 10–11 km al sureste de Tebanca (lado sureste de Lago de Catemaco) por camino, 1200 m, 26 Abr 1982, *D. Lorence, R. Cedillo T. & G. Ibarra M. 4141* (Holotype MEXU; Isotypes CHAPA, MEXU, MO).

Deppea purpusii Standl., N. Amer. Fl. 32: 88. 1921. Type: MEXICO: Veracruz, Sierra Madre between Misantla and Naolinco, Aug 1912, *C. A. Purpus 6260* (Holotype US 464734 (photos MEXU, PTBG); Isotypes BM, F (photo PTBG), GH, n.v., MO (photo PTBG)).

Deppea schultzei Lorence, Allertonia 4: 422. 1988. Type: MEXICO: Guerrero, Malinaltepec, Mar 1930, *L. Schultze 363* (Holotype B, destroyed, fragment F (photos MEXU, PTBG)). New name for *Edithea floribunda* Standl., Trop. Woods 34: 1. 1933. Not *Deppea floribunda* Hemsl., 1879.

Deppea scoti (J. H. Kirkbr.) Lorence, Allertonia 4: 398. 1988. *Omiltemia scoti* J. H. Kirkbr., Syst. Bot. 9: 411. 1984. Type: MEXICO: Puebla, above Teotitlán del Camino on road to Huautla de Jiménez, 2000–3250 m, 3 Aug 1961, *C. E. Smith, Jr., F. A. Peterson & N. Tejeda 4137* (Holotype US; Isotype GH (photo PTBG)).

Deppea splendens Breedlove & Lorence, Phytologia 63: 43, *fig. 1*. 1987. Type: MEXICO: Chiapas, Mun. of Motozintla de Mendoza, southwest (side) of Cerro Mozotal, 11 km northwest of junction of road to Motozintla along road to El Porvenir and Siltepec, 2100 m, 18 Sep 1976, *D. E. Breedlove 40258* (Holotype CAS; Isotypes MEXU, MO (photo PTBG)).

Deppea stenosepala Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 161. 1930. Type: MEXICO: Oaxaca, Tlaxiaco à Chicahuastla, 1844, *H. Galeotti 2685* (Holotype LE, n.v., fragment F; Isotype P, n.v., fragment F)).—**Rondeletia jurgensenii** Hemsl.

Deppea tenuiflora Benth., Pl. Hartw. 349. 1857. Type: MEXICO: Chiapas, San Bartolo, Feb 1840, *Linden 1644* (Holotype K; Isotype LE, n.v., fragment F).

Deppea umbellata Hemsl., Diagn. Pl. Nov. Mexic. 31. 1879. Type: MEXICO: Veracruz, région de Orizaba à Izhuatlancillo, 15 Mai 1866, *E. Bourgeau 2428* (Lectotype P (photos MEXU, PTBG); Isolectotypes F, K (photo PTBG), P, 3 sheets (photos MEXU, PTBG), US, 2 sheets; designated by Lorence & Dwyer, 1988).

Didymaea Hook. f. in Benth. & Hook. f., Gen. Pl. 2(1): 150. 1873. Type: Didymaea mexicana Hook. f.

Didymaea alsinoides (Schltdl. & Cham.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1291. 1938. *Nertera alsinoides* Schltdl. & Cham., Linnaea 6: 413. 1831. Type: MEXICO: Cuesta Grande de Jalacingo, *Schiede & Deppe 1271* (Holotype presumably HAL, n.v.).

Didymaea alsinoides (Schltdl. & Cham.) Standl. var. *australis* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1292. 1938. Type: COSTA RICA: Charpinteira [La Carpintiera], 1700 m, Nov 1908, *A. Brade & A. C. Brade 2143* (Holotype F 838717 (photo PTBG)). —**Didymaea alsinoides** (Schltdl. & Cham.) Standl.

Didymaea alsinoides (Schltdl. & Cham.) Standl. var. *mollis* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1292. 1938. Type: COSTA RICA: San José, Cerro de Las Vueltas, 2700–3000 m, 29 Dec 1925–1 Jan 1926, *P. C. Standley & J. Valerio 43949* (Holotype US 1253422 (photos MEXU, PTBG); Isotype F (photo PTBG)).—**Didymaea alsinoides** (Schltdl. & Cham.) Standl.

Didymaea australis (Standl.) L. O. Williams, Fieldiana: Bot. 24(11): 61. 1975. *Didymaea alsinoides* (Schltdl. & Cham.) Standl. var. *australis* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1292. Type: COSTA RICA: Charpinteira [La Carpintiera], 1700 m, Nov 1908, *A. Brade & A. C. Brade 2143* (Holotype F 838717 (photo PTBG)). 1938.—**Didymaea alsinoides** (Schltdl. & Cham.) Standl.

Didymaea floribunda Rzed., Bol. Soc. Bot. México 44: 72, *fig. 1*. 1983. Type: MEXICO: Distr. Federal, Del. Villa A. Obregón, Limbo, 2700 m, 4 Aug 1979, *A. Ventura A. 3479* (Holotype ENCB).

Didymaea hispidula L. O. Williams, Fieldiana: Bot. 24(11): 61. 1975. Type: GUATEMALA: San Marcos, Sierra Madre Mountains about 6 km (airline) north of San Marcos, 2700 m, 13 Dec 1963, *L. O. Williams, A. Molina R. & T. Williams 25896* (Holotype F 1655451 (photo PTBG))

Didymaea linearis Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 297. 1929. Type: MEXICO: Jalisco, Real Alto, Peña Gorda, Sierra Madre Occidental, 2500 m, 21 Feb 1927, *Y. Mexia 1726* (Holotype F 579896 (photo PTBG); Isotypes A, n.v., MO (photos MEXU, PTBG), US (photos MO, PTBG; fragment F)).

Didymaea mexicana Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 150. 1873. Syntypes: MEXICO: Veracruz, Pico de Orizaba, 10000 ft., *Bates s.n.* (K, n.v.); Orizaba, *Linden 1403* (K, n.v.), *Galeotti 4405* (K, n.v.), *Bourgeau 3050* (K, n.v.), *F. Mueller 1519* (K, n.v.), *F. Liebmann Rub. Mexic. 255* (K, n.v.).

Didymaea microflosculosa L. O. Williams, Fieldiana: Bot. 24(11): 61. 1975. Type: GUATEMALA: San Marcos, near Aldea Fraternidad, between San Rafael Pie de la Cuesta and Palo Gordo, west-facing slopes of the Sierra Madre Mountains, 1800–2400 m, 10–18 Dec 1963, *L. O. Williams, A. Molina R. & T. Williams 25944* (Holotype F 1655450 (photo PTBG)).

Didymaea microphylla L. O. Williams, Fieldiana: Bot. 24(11): 62. 1975. Type: GUATEMALA: Quezaltenango, narrow ridge of Volcán Santo Tomás, 2500–3700 m, 22 Jan 1940, *J. A. Steyermark 34790* (Holotype F 1038453 (photo PTBG)).

Didymochlamys Hook. f., Icon. Pl. *pl. 1122*. 1872. Type: Didymochlamys whitei Hook. f.

Didymochlamys connellii N. E. Br., Trans. Linn. Soc. Lond. (Bot.), ser. 2, 6: 34, *pl. 5, fig. 1–9.* 1901. Type: VENEZUELA: Bolivár, Monte Roraima, 1050 m, *McConnell & Quelch 714* (location unknown).

Diodia L., Sp. Pl. 1: 104. 1753; Gen. Pl. ed. 5: 45. 1754. Type: Diodia virginiana L.

Diodia apiculata (Willd. ex Roem. & Schult.) K. Schum. in Engler, Bot. Jahrb. Syst. 10: 313. 1889. *Spermacoce apiculata* Willd. ex Roem. & Schult., Syst. Veg. 3: 531. 1818. Type: BRAZIL: *Hoffmannsegg s.n.* (Holotype: B-W 2626, n.v.)

Diodia aspera Brandegee, Univ. Calif. Publ. Bot. 6: 68. 1914. Type: MEXICO: Chiapas, Sierra de Tonalá, *C. A. Purpus 6830* (Holotype UC 172537, n.v.). Mixed collection, with elements of both *D. apiculata* and *D. teres*.

Diodia brasiliensis Spreng. var. *angulata* (Benth.) Standl., Carnegie Inst. Wash. Publ. 461: 90. 1935. *Triodon angulatum* Benth., Pl. Hartweg. 70. 1840. Type: MEXICO: Oaxaca, Teotolcingo, in montibus Chinantla, *T. Hartweg 507* (Holotype K, n.v.).—**Galianthe brasiliensis** (Spreng.) E. L. Cabrera & Bacigalupo ssp. **angulata** (Benth.) E. L. Cabrera & Bacigalupo.

Diodia crassifolia Benth., Bot. Voy. Sulphur 108. 1845. Type: MEXICO: Nayarit, San Blas [near Tepic], *Barclay s.n.* (Holotype BM, n.v.).

Diodia denudata Standl., J. Wash. Acad. Sci. 15: 105. 1925. Type: PANAMA: Panamá, Río Tapia, 7 Dec 1923–11 Jan 1924, *P. C. Standley 28123* (Holotype US 1154022 (photos MEXU, PTBG)).—**Diodia spicata** Miq.

Diodia erecta Sessé & Moç., Fl. Mexic., ed. 1. 26. 1893 (La Naturaleza ser. II, 2. App. 2. 1893). Type: MEXICO: Habitat in Oppidis S. Bernardi de *Xochiatlam* et *Hueitlalpae*. Floret Augusto ad Octobrim, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Diodia indecora DC., Prodr. 4: 565. 1830. Type: MEXICO: Cordiere de Guehila, Oct 1827, *M. Berlandier 1186* (Holotype G-DC, n.v. (photo MO, microfiche 4: 565.34)).—**Status uncertain**, probably **Spermacoce** sp.

Diodia maritima Thonn. ex Schumach., Besk. Guin. Pl. 75. 1827. Syntypes: AFRICA: in sabulosis subimmersis ad littora oceani in Guinea et ad Dakar prom. viridis Africa, *Perrottet s.n.* and *Leprieur s.n.* (location unknown).—**Diodia serrulata** (P. Beauv.) G. Taylor

Diodia ocymifolia (Willd. ex Roem. & Schult.) Bremek., Rec. Trav. Bot. Neerl. 31: 305. 1934. *Spermacoce ocymifolia* Willd. ex Roem. & Schult., Syst. Veg. 3: 530. 1819 [as *ocimifolia*]. Type: WEST INDIES: Without precise locality, 1768, *Rudolphi s.n* (presumably B-W, n.v.).—**Spermacoce ocymifolia** Willd. ex Roem. & Schult.

Diodia prostrata Sw., Prodr. Veg. Ind. Occ. 218. 1788. Type: JAMAICA: *Swartz s.n.* (Presumably herb. Heretier, S, n.v., fragment G-DC, n.v. (microfiche 4: 562.9)).—**Diodia teres** Walter

Diodia prostrata Sw. var. *longiseta* DC., Prodr. 4: 562. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 562.9)).—**Diodia teres** Walter

Diodia pulchella Brandegee, Univ. Calif. Publ. Bot. 10: 418. 1924. Type: MEXICO: Chiapas, Hacienda Monserrate, Sep 1923, *C. A. Purpus 9221* (Holotype UC 223390, n.v.; Isotypes MO (photo PTBG), US (photos MEXU, PTBG)).—**Diodia apiculata** (Willd. ex Roem. & Schult.) K. Schum.

Diodia rigida (Willd. ex Roem. & Schult.) Cham. & Schltdl., Linnaea 3: 341. 1828. *Spermacoce rigida* Willd. ex Roem. & Schult., Syst. 3: 531. 1818. Not *Diodia rigida* Salisb. 1796. Type: VENEZUELA: Silla de Caracas, *Humboldt & Bonpland* (Holotype B-W 2628, n.v. (microfiche IDC 7440. 174. III,4)).—**Diodia apiculata** (Willd. ex Roem. & Schult.) K. Schum.

Diodia sarmentosa Sw., Prodr. Veg. Ind. Occ. 30. 1788. Type: JAMAICA: No specimen cited. A Swartz specimen would be a probable neotype according to Howard (1989).

Diodia serrulata (P. Beauv.) G. Taylor in Exell, Cat. Pl. S. Tomé 220. 1944. *Spermacoce serrulata* P. Beauv., Fl. Oware Benin 1: 39, *t. 23*. 1805. Type: AFRICA: Nigeria, *Palisot de Beauvois s.n.* (presumably P, n.v.).

Diodia spicata Miq., Stirp. Surin. Sel. 179, pl. 52. 1851. Type: SURINAM: Sylvarum prope Bergendaal, Oct, *Focke* [*1140*] (presumably U, n.v.; this is Miquel's lectotype according to Howard, 1989). *Dasycephala*.

Diodia teres Walter, Fl. Carol. 87. 1788. Type: U.S.A.: In sabulosis sylvarum a Virginia ad Carolinam, *Walter s.n.* (location unknown.)

Diodia teres Walter var. *angustata* A. Gray, Syn. Fl., ed. 2. 1(2): 35. 1886. Type: MEXICO: Sonora, between, San Pedro and Santa Cruz, Sep 1851, *C. A. Wright 1122* (Holotype GH, n.v.).—**Diodia teres** Walter

Diodia teres Walter subsp. *angustata* (A. Gray) Steyerm., Acta Bot. Venez. 6: 184. 1971. *Diodia teres* Walter var. *angustata* A. Gray, Syn. Fl. ed. 2 1(2): 35. 1886. Type: MEXICO: Sonora, between San Pedro and Santa Cruz, Sep 1851, *C. A. Wright 1122* (Holotype GH, n.v.).—**Diodia teres** Walter

Diodia teres Walter subsp. *prostrata* (Sw.) Steyerm., Acta Bot. Venez. 6: 185. 1971. *Diodia prostrata* Sw., Prodr. Nov. Gen. Sp. Pl. 30. 1788. Type: JAMAICA: *Loefling* (location unknown).—**Diodia teres** Walter

Diodia tetracocca (M. Martens & Galeotti) Hemsl., Diag. Pl. Nov. 1: 32. 1879. *Spermacoce ? tetracocca* M. Martens & Galeotti, Bull. Acad. Roy. Soc. Bruxelles 11: 132. 1844. Type: MEXICO: Michoacán, Santa María, cerca Morelia, *H. Galeotti 2587* (Holotype BR, n.v.; Isotype K, n.v.). —**Richardia tricocca** (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv.

Diodia tricocca Torr. & A. Gray, Fl. N. Amer. 2: 30. 1841. Type: U.S.A.: Texas, *Drummond 117* (Holotype GH, n.v.; Isotype G, n.v.). —**Richardia tricocca** (Torr. & A. Gray) Standl.

Diodia villosa Sessé & Moç. ex DC., Prodr. 4: 562. 1830. Type: MEXICO: *Sessé & Moçiño s.n.* (presumably Herb. Dunat & Herb. Moricand, n.v.; Fl. Mexic. Ic. G-DC, n.v. (photo MO)).—**Mitracarpus hirtus** (L.) DC.

Diphragmus C. Presl, Bot. Bermerk. 80. 1844. Type: Diphragmus scaber C. Presl. [Herein treated as synonym of *Staelia* Cham. & Schlechtendal.]

Diphragmus scaber C. Presl, Bot. Bermerk. 81. 1844. Type: MEXICO: Habitat in Mexico, precise locality and collector not cited. —**Staelia scabra** (C. Presl) Standl.

Dressleriopsis Dwyer, Ann. Missouri Bot. Gard. 67: 153. 1980. Type: Dressleriopsis panamensis Dwyer [Herein treated as synonym of *Lasianthus* Jack.]

Dressleriopsis panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 154. 1980. Type: PANAMA: Panamá, near La Eneida, beyond Cerro Jefe, 25 Jul 1968, *R. Dressler 3560* (Holotype MO 2267568 (photo PTBG); Isotypes MEXU, US (photos MEXU, PTBG)). —**Lasianthus panamensis** (Dwyer) Robbr.

Duggena Vahl in H. West, Bidr. Beskr. Ste. Croix 269. 1793. Nomen nudum. Type: Not cited. [Herein treated as a synonym of *Gonzalagunia* Ruiz & Pav.] Note: Standley (Contr. U.S. Natl. Herb. 18: 124–125. 1916) transferred a number of names from *Gonzalea* and *Gonzalagunia* to *Duggena*, citing *Duggena* Vahl (in West 1793) as the oldest available generic name. However, Howard (1989: 417) notes that when H. West proposed the name, he "gave no generic description for *Duggena*, referring only to *Barleria hirsuta* Jacq. [Acanthaceae] while supplying the new name *Duggena richardii.*" Consequently *Duggena* Vahl in H. West is an invalid name. The reason *Duggena* was attributed to Vahl is that West (loc. cit. p. 263) stated the new names given in italics are Vahl's.

Duggena bracteosa (Donn. Sm.) Standl., Contr. U.S. Natl. Herb. 18: 125. 1916. *Gonzalea bracteosa* Donn. Sm., Bot. Gaz. (Crawfordsville) 33: 252. 1902. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Apr 1896, *J. D. Smith 6583*

(Holotype US 943468 (photos MEXU, PTBG); Isotypes F, n.v., NY, n.v., US (photos MEXU, PTBG)).—**Gonzalagunia bracteosa** (Donn. Sm.) B. L. Rob.

Duggena hayesii (Wernham) Standl., Contr. U.S. Natl. Herb. 18: 125. 1916, comb. inval. *Gonzalea hayesii* Wernham, J. Bot. 51: 219. 1913. Type: PANAMA: Panamá, in woods near Panama, *Hayes s.n.* (Holotype BM, n.v.).—**Gonzalagunia panamensis** (Cav.) K. Schum.

Duggena nivea (Bartl. ex DC.) Standl., Contr. U.S. Natl. Herb. 18: 125. 1916, comb. inval. *Gonzalea nivea* Bartl. ex DC., Prodr. 4: 436. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.). The specimen *Lesta & Gomes 42* (W, n.v. (photo MO)) is not the type.—**Rondeletia buddleoides** Benth.

Duggena ovatifolia (Donn. Sm.) Standl., Contr. U.S. Natl. Herb. 18: 126. 1916, comb. inval. *Gonzalea ovatifolia* Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 336. 1899. Type: COSTA RICA: Cartago, Atirro, *J. D. Smith 6599* (Lectotype US 943467 (photos MEXU, PTBG); Isolectotypes F, n.v., GH, US).—**Gonzalagunia ovatifolia** (Donn. Sm.) B. L. Rob.

Duggena panamensis (Cav.) Standl., Contr. U.S. Natl. Herb. 18: 126. 1916, comb. inval. *Buena panamensis* Cav., Anal. Hist. Nat. 2: 279. 1800. Type: PANAMA: Lancon, *Née s.n.* (Holotype MA, n.v.; Isotype F (photo PTBG)).—**Gonzalagunia panamensis** (Cav.) K. Schum.

Duggena rudis Standl., Contr. U.S. Natl. Herb. 18: 125. 1916. Type: PANAMA: Panamá, shady places along Río Chagres at El Vigía, 12 Jan 1911, *H. Pittier 2378* (Holotype US 676602 (photo PTBG)).—**Gonzalagunia rudis** (Standl.) Standl.

Duggena thyrsoidea (Donn. Sm.) Standl., Contr. U.S. Natl. Herb. 18: 126. 1916, comb. inval. *Gonzalea thyrsoidea* Donn. Sm., Bot. Gaz. (Crawfordsville) 13: 188. 1888. Type: GUATEMALA: Alta Verapaz, Berge bei Pansamalá, 3800 ft., May 1887, *H. von Tuerckheim 1249* (Holotype US 941409 (photos MEXU, PTBG)).—**Gonzalagunia thyrsoidea** (Donn. Sm.) B. L. Rob.

Duhamelia Pers., Syn. 1: 203. 1805, nom. superfl. Based on Hamelia patens Jacq. 1760. [Herein treated as a synonym of *Hamelia* Jacq.]

Dunhamelia patens (Jacq.) Pers., Syn. 1: 203. 1805. Type: SANTO DOMINGO: *Jacquin s.n.* (location unknown).—**Hamelia patens** Jacq.

Dukea Dwyer, Ann. Missouri Bot. Gard. 53: 360–367. 1966. Type: Dukea panamensis Dwyer. [Herein treated as a synonym of *Raritebe* Werhnam.]

Dukea blumii Dwyer, Ann. Missouri Bot. Gard. 53: 365. 1966. Type: PANAMA: Colón, around Dos Bocas, Río Fato Valley, *H. Pittier 4223* (Holotype: MO 1227470 (photo PTBG); Isotype US). *Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Dukea darienensis Dwyer, Ann. Missouri Bot. Gard. 53: 365. 1966. Type: PANAMA: Darién, Chepigana District, Cana-Cuasí Trail (Camp 2), *M. E. Terry & R. A. Terry 1487* (Holotype MO 1196543 (photo PTBG); Isotype F)). *Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Dukea euryphylla (Standl.) Dwyer, Ann. Missouri Bot. Gard. 53: 366. 1966. *Coussarea euryphylla* Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 294. 1929. Type: PANAMA: Bocas del Toro, Almirante (or Buena Vista Camp on Chiriquí Trail), *G. P. Cooper 228* (Holotype F, n.v.). *Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Dukea panamensis Dwyer, Ann. Missouri Bot. Gard. 53: 364. 1966. Type: PANAMA: Darién, Cana and vicinity, 2000–6500 ft., 17 Apr–8 Jun 1908, *E. L. Tyson, J. Dwyer & K. Blum 3326* (Holotype MO 2084467 (photo PTBG)). *Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Dukea trifoliata Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 139. 1967. Type: PANAMA: Coclé, El Valle, potato farm above village of El Valle, 12 Jul 1962, *J. D. Dwyer 1933* (Holotype MO 3831231 (photos MO, PTBG)). *Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Dukea victoriae Dwyer, Ann. Missouri Bot. Gard. 53: 364. 1966. Type: PANAMA: Darién, Cerro Pirre, cloud forest, Oct 1962, *J. A. Duke 6099* (Holotype MO 1840647 (photo PTBG); Isotype MO 1832075 (photo PTBG)). *Raritebe*.—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Duroia L. f., Suppl. Pl. 209. 1781. Nomen. cons. Type: Duroia eriopila L. f.

Duroia costaricensis Standl., Contr. U.S. Natl. Herb. 20: 208. 1919. Type: COSTA RICA: Marais de Sierpe, Mar 1892, *H. Pittier 6803* (Holotype US 938658 (photos MEXU, PTBG)). The name *Duroia hirsuta* (Poepp. & Endl.) K. Schum., an Amazonian species, was misapplied to this species by Dwyer (1980: 155).

Duroia genipifolia Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 186. 1940. Type: GUATEMALA: Izabal, Río Dulce, between Livingston and 6 miles up river, on north side (right side going up river), sea level, 14 Apr 1940, *J. A. Steyermark 39382* (Holotype F 1035218 (photo PTBG)). —**Randia genipifolia** (Standl. & Steyerm.) Lorence

Duroia panamensis Dwyer in Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 38. 1968. Type: PANAMA: Bocas del Toro, Duwebdulup Peak, N of Río Teribe across from W. Huron (behind chief's house), 300–900 ft., 13 Apr 1968, *J. H. Kirkbride & J. A. Duke 571* (Holotype MO 1968346); Isotype MO). —**Hippotis albiflora** H. Karst.

Duroia utleyorum Dwyer in W. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 127. 1993. Type: COSTA RICA: Puntarenas, Rincón de Osa, stream and slopes adjacent to Airfield, 20–300 m, 6–7 Feb 1974, *R. L. Liesner 1774* (Holotype CR, n.v.; Isotypes MO 3030387 (photo PTBG), TEX-LL).—**Alibertia utleyorum** (Dwyer) C. M. Taylor

Edithea Standl., Trop. Woods 34: 1. 1933. Type: Edithea floribunda Standl. [Herein treated as a synonym of *Deppea* Cham. & Schltdl.]

Edithea floribunda Standl., Trop. Woods 34: 1. 1933. Not *Deppea floribunda* Hemsl., 1879. Type: MEXICO: Guerrero, Malinantepec, Mar 1930, *L. Schultze 363* (Holotype B, presumably destroyed, fragment F (photos MEXU, PTBG)).—**Deppea schultzei** Lorence

Eizia Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 50. 1940. Type: Eizia mexicana Standl.

Eizia mexicana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 50. 1940. Type: MEXICO: Chiapas, Mt. Tacaná, 1000–2000 m, Aug 1938, *E. Matuda 2403* [sphalm. as *2402* in protologue] (Holotype MICH, n.v. (fragment and photo F); Isotypes A, n.v., TEX-LL (photos MEXU, PTBG), US, 2 sheets (photos MEXU, PTBG)).

Elaeagia Wedd., Monogr. Cinch. 94. 1849. Type: Elaeagia utilis (Goud.) Wedd.

Elaeagia asperula Standl. ex Steyerm., Acta Biol. Venez. 4: 37. 1964. Type: COLOMBIA: Valle, Río Calima (región del Chocó), La Trojita, 5–50 m, 19 Feb–10 Mar 1944, *J. Cuatrecasas 16647* (Holotype VEN, n.v.; Isotype F (photo PTBG)).

Elaeagia auriculata Hemsl., Diag. Pl. Nov. Mexic. 32. 1879. Type: COSTA RICA: Without precise locality, alt. 4500 ped., *Endres 95* (Holotype K, n.v.)

Elaeagia karstenii Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 50. 1930. Type: VENEZUELA: Near Colonia Tovar, 1854–55, *A. Fendler 594* (Holotype GH, n.v., fragment F; Isotypes MO, NY, n.v.).

Elaeagia myriantha (Standl.) C. M. Taylor & Hammel, Novon 3: 490. 1993. *Sickingia myriantha* Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Type: COLOMBIA: Magdalena, Las Nubes road,

region of Santa Marta, 1200 m, 3 Dec 1898, *H. H. Smith 1810* (Holotype F 138660; Isotypes MO, NY, n.v., US, n.v., W, n.v., Y, n.v.). *Holtonia, Simira*.

Elaeagia nitidifolia Dwyer, Ann. Missouri Bot. Gard. 67: 157. 1980. Type: PANAMA: Panamá, region of Cerro Jefe, ca. 1000 m, 3 Oct 1969, *M. D. Correa A., R. L. Dressler, N. Escobar & W. H. Lewis 1608* (Holotype MO 2424954 (photo PTBG); Isotype MO 2424954 (photo PTBG)).

Elaeagia uxpanapensis Lorence, Bol. Soc. Bot. México 45: 66, *fig. 1*. 1983 (1984). Type: MEXICO: Oaxaca, Mun. de Matías Romero (Zona de Uxpanapa), a 2 km SE del aserradero La Floresta sobre el camino a Río Verde, a 15 km S de Esmeralda, 250 m, 25 May 1981, *T. Wendt, S. Koch, A. Villalobos & J. García 3299* (Holotype MEXU; Isotypes CHAPA (33 others were also distributed).

Ereicoctis Kuntze, Rev. Gen. Pl. 1: 281. 1891. Type: Not designated.

Ereicoctis acerosa (A. Gray) Kuntze, Rev. Gen. Pl. 1: 281. 1891. *Hedyotis acerosa* A. Gray, Pl. Wright. 1: 81. 1852. U.S.A.: Texas, high prairies, from Live Oak Creek to the Las Moras, Jun 1849, *C. Wright 237* (Holotype GH, n.v.; Isotype US).—**Hedyotis acerosa** A. Gray

Ereicoctis cervantesii (Kunth) Kuntze, Rev. Gen. Pl. 281. 1891. *Hedyotis cervantesii* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 390. 1820. Type: MEXICO: *A. Bonpland s.n.* (presumably P-Bonpland, n.v.; Isotype B, presumably destroyed (photo MO)).—**Hedyotis cervantesii** Kunth

Erithalis P. Browne, Civ. Nat. Hist. Jamaica 165, *t. 17, fig. 3*. 1756. Lectotype: Erithalis fruticosa L.

Erithalis fruticosa L., Syst. Nat., ed. 10. 2: 930. 1759. Type: JAMAICA: Not designated, based on Browne, Civ. Nat. Hist. Jamaica *t. 17, fig. 3*. According to Howard (1989), a Browne figure or specimen would be a probable lectotype.

Ernodea Sw., Prodr. 29. 1788. Type: Ernodea littoralis Sw.

Ernodea littoralis Sw., Prodr. Veg. Ind. Occ. 29, *pl. 223, tab. 4*. 1788. Type: JAMAICA: Not designated; Swartz referred to the Sloan and Browne descriptions. According to Howard (1989) a lectotype needs to be designated.

Evea Aubl., Hist. Pl. Guian. 1: 100, *t. 39*. 1775. nom. rej. vs. Cephaëlis Sw. 1788, nom. cons. Type: Evea guianensis Aubl. [Herein treated as a synonym of *Psychotria* L.]

Evea axillaris (Sw.) Standl., Contr. U.S. Natl. Herb. 18: 123. 1916. *Cephaëlis axillaris* Sw., Prodr. 3: 45. 1788. Not *Psychotria axillaris* Willd., 1798. Type: WEST INDIES: St. Christopher, *Swartz s.n.* (Holotype presumably S, n.v.). *Tapogomea*. —**Psychotria aubletiana** Steyerm.

Evea chiapensis Standl., Contr. U.S. Natl. Herb. 23: 1392. 1926. Not *Psychotria chiapensis* Standl., 1926. Type: MEXICO: Chiapas, Cerro del Boquerón, *C. A. Purpus 6928* (Holotype US 567214 (photos MEXU, PTBG); Isotypes F, MO (photos MEXU, PTBG)). *Cephaëlis, Psychotria*.—**Psychotria molinarum** Lorence

Evea dichroa Standl., Contr. U.S. Natl. Herb. 18: 124. 1916. Type: PANAMA: Chiriquí, Cuesta de las Palmas, S slope of Cerro de la Horqueta, 1700–2100 m, 17–19 Mar 1911, *H. Pittier 3218* (Holotype US 677615 (photos MEXU, PBTG); Isotype F). *Cephaëlis*. —**Psychotria dichroa** (Standl.) C. M. Taylor

Evea elata (Sw.) Standl., Contr. U.S. Natl. Herb. 18: 123. 1916. *Cephaëlis elata* Sw., Prodr. Veg. Ind. Occ. 45. 1788. Type: JAMAICA: *Swartz s.n.* (presumably S, n.v.).—**Psychotria elata** (Sw.) Hammel

Evea guapilensis Standl., J. Wash. Acad. Sci. 15: 104. 1925. Type: COSTA RICA: Limón, vicinity of Guápiles, 300–500 m, 12–13 Mar 1934, *P. C. Standley 37025* (Holotype US 1153029 (photos MEXU, PTBG)). *Cephaëlis*. —**Psychotria guapilensis** (Standl.) Hammel

Evea ipecacuanha (Brot.) Standl., Contr. U.S. Natl. Herb. 18: 123. 1916. *Callicocca*

ipecacuanha Brot., Trans. Linn. Soc. London 6: 137. 1802. Type: BRAZIL: Without precise locality, *Gómez s.n.* (presumably LISU, n.v.). *Cephaëlis*.—**Psychotria ipecacuanha** (Brot.) Stokes

Evea nana Standl., J. Wash. Acad. Sci. 15: 105. 1925. *Cephaëlis nana* (Standl.) Standl. Type: PANAMA: Canal Zone, hills N of Frijoles, 19 Dec 1923, *P. C. Standley 27550* (Holotype US 1153871 (photos MEXU, PTBG); Isotype F). *Cephaëlis*.—**Psychotria guapilensis** (Standl.) Hammel

Evea tomentosa (Aubl.) Standl., Contr. U.S. Natl. Herb. 18: 123. 1916. *Tapogomea tomentosa* Aubl., Hist. Pl. Guiane 160. 1775. Type: FRENCH GUIANA: *Aublet s.n.* (Holotype presumably P or BM, n.v.; Isotype B, presumably destroyed (photo MO)). *Cephaëlis*.—**Psychotria poeppigiana** Muell. Arg.

Exandra Standl., J. Wash. Acad. Sci. 13: 292. 1923. Type: Exandra rhodoclada Standl. [Herein treated as a synonym of *Simira* Aubl.]

Exandra rhodoclada Standl., J. Wash. Acad. Sci. 13: 292. 1923. Type: MEXICO: Oaxaca, between La Venta and Niltepec, 200 ft., 14 Jul 1895, *E. W. Nelson 2796* (Holotype US 229232 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).—**Simira rhodoclada** (Standl.) Steyerm.

Exostema (Pers.) Bonpl. in Humb. & Bonpl., Pl. Aequin. 1: 131. 1807 ("1808"). Lectotype: Exostema caribaeum (Jacq.) Roem. & Schult. (designated by Rogers, 1987: 165).

Exostema canescens Bartl. ex DC., Prodr. 4: 359. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 359.3)).—**Status uncertain** ("scarcely of this genus" according to Standley, 1926).

Exostema caribaeum (Jacq.) Roem. & Schult., Syst. Veg. 5: 19. 1819. *Cinchona caribaea* Jacq., Enum. Pl. Carib. 16. 1760. Type: DOMINICA: Without precise locality, *De Ponthieu s.n.* (lectotype BM, n.v.; illustrated in Lambert, Desc. Cinchona 24, *t. 4.* 1797; designated by McDowell (1996b: 289)). Howard (1989) stated that no type specimens are known and a neotype needs to be designated. Later, T. McDowell, in his review of the genus, selected a lectotype from among original material.

Exostema coulteri Hook. f. ex Hemsl., Diag. Pl. Nov. 32. 1879, [as Exostemma]. Type: MEXICO: Hidalgo, Zimapan, *Coulter 209* (Holotype K, n.v.; Isotype MO).—**Syringantha coulteri** (Hook. f. ex Hemsl.) T. McDowell

Exostema indutum Standl., N. Amer. Fl. 32: 126. 1921. Type: MEXICO: Oaxaca, Villa Alta, 3000 ft., Aug, *H. Galeotti 2664* (Holotype US 572997; Isotypes P, 2 sheets (photos MEXU, PTBG)).—**Exostema mexicanum** A. Gray

Exostema longicuspe Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 48. 1853. Type: COSTA RICA: In insula San Lucas, Aug 1849, *Oersted 11403* (Holotype C, n.v. (photo US)).—**Exostema caribaeum** (Jacq.) Roem. & Schult.

Exostema mexicanum A. Gray, Proc. Amer. Acad. Arts 5: 180. 1861. Type: MEXICO: [Presumably Veracruz] Prov. Huasteca, Wartenberg, near Tantoyuca, 1858, *L. C. Ervendberg 125* (Holotype GH, n.v.; Isotype P (photos MEXU, PTBG)).

Exostema occidentale Benth., Bot. Voy. Sulphur 104. 1844. Type: COLOMBIA: Nariño, Isla Gorgona, *Barclay 354* or *Hinds 354* (Holotype K, n.v.).—**Rustia occidentalis** (Benth.) Hemsl.

Faramea Aubl., Hist. Pl. Guian. 1: 192, *t. 40.* 1775. Type: Faramea corymbosa Aubl.

Faramea altipetens Dwyer, Ann. Missouri Bot. Gard. 67: 162. 1980. Type: PANAMA: Darién, Cerro Tacarcuna, south face of westernmost peak, lower montane wet forest, 1500 m, 30 Jan 1975, *A. Gentry & S. Mori 14013* (Holotype MO 2272402 (photo PTBG)).

Faramea belizensis Standl., Carnegie Inst. Wash. Publ. 461: 90. 1935. Type: BRITISH HONDUDRAS (BELIZE): Camp 36, British

Honduras–Guatemala survey, 2800 ft., 1 Jul 1934, *W. A. Schipp S-721* (Holotype F 733535 (photo PTBG); Isotypes A, n.v., F, G, n.v., MO (photos MEXU, PTBG)).—**Faramea occidentalis** (L.) A. Rich.

Faramea bocataurensis Dwyer, Ann. Missouri Bot. Gard. 67: 163. 1980. Type: PANAMA: Bocas del Toro, eastern slope of La Zorra to Divide, mossy cloud forest, 19 Apr 1968, *J. H. Kirkbride & J. A. Duke 806* (Holotype MO 1968230 (photos MEXU, PTBG); Isotype MO 2165813 (photos MEXU, PTBG)).

Faramea brachysiphon Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 62. 1930. Type: BRITISH HONDURAS (BELIZE): Middlesex, 200 ft., 17 Sep 1928, *W. A. Schipp 345* (Holotype F 603047; Isotypes A, n.v., GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Faramea bullata Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 294. 1929. Type: PANAMA: Bocas del Toro, region of Almirante, Kankintoe 10 miles above Holstein, Jan–Mar 1928, *G. P. Cooper 507* (Holotype F 579385 (photo PTBG); Isotype NY, n.v.).—**Faramea trinervia** K. Schum.

Faramea capulifolia Dwyer in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 132. 1993. Type: PANAMA: Darién, Cerro Pirre, ridgetop at 1200 m, *J. P. Folsom 4262* (Holotype MO 2620580). Note: the following collections were also annotated as "type" by J. D. Dwyer but are not types: COSTA RICA: Puntarenas, Monteverde Cloud forest Reserve, 1500–1600 m, 8 Nov 1986, *W. A. Haber ex E. Bello C. 6235* (MO 36482259, photo PTBG). PANAMA: Darién, Cerro Pirre, 10–20 Jul 1977, *J. P. Folsom 4435* (MO 2620712 (photo PTBG)).

Faramea caputanguis Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 29. 1968. Type: PANAMA: Panamá, Cerro Jefe, 2900 ft., 29 Jul 1967, *J. D. Dwyer & G. Gauger 7375* (Holotype MO 1961869; Isotypes GH, n.v., K, n.v., MO (photos MEXU, PTBG), NY, n.v., UC, n.v., US).—**Faramea papirifolia** (Standl. ex Steyerm.) C. M. Taylor

Faramea cobana Donn. Sm., Bot. Gaz. (Crawfordsville) 57: 422. 1914. Type: GUATEMALA: Alta Verapaz, Cobán, 1550 m, Jul 1912, *H. von Tuerckheim 2474* (Holotype US 943628 (photos MEXU, PTBG)).

Faramea correae C. M. Taylor, Novon 6: 289, *fig 1C, D*. 1996. Type: PANAMA: Panamá, Parque Nacional Altos de Campana, sendero de Interpretación, 1 km al E del campamento de los guardaparques de INRENARE, 8°40'N, 79°55'W, 800–900 m, 9 Sep 1993, *M. D. Correa A., E. Montenegro & E. Hidalgo 9983* (Holotype PMA 38229, n.v.; Isotypes MO 4641338, 4658116).

Faramea eurycarpa Donn. Sm., Bot. Gaz. (Crawfordsville) 44: 113. 1907. Type: COSTA RICA: Forêts de Las Vueltas, Tucurrique, Dec 1898, *A. Tonduz 12880* (Holotype US 943627 (photos MEXU, PTBG); Isotypes B, presumably destroyed (fragment F), GH, 2 sheets (photos PTBG), P, 2 sheets (photos MEXU, PTBG)).

Faramea hondurae Standl., J. Wash. Acad. Sci. 18: 169. 1928. Type: COSTA RICA: San José, La Hondura, 1400 m, 16 Mar 1924, *P. C. Standley 37890* (Holotype US 1153105 (photos MEXU, PTBG)).

Faramea jefensis Dwyer & Hayden, Phytologia 15: 56. 1968. Type: PANAMA: Panamá, eastern slope of Cerro Jefe in *Clusia* forest, 2700 ft., 8 Feb 1966, *E. L. Tyson et al. 3396* (Holotype MO 1936328 (photo PTBG); Isotypes F, GH, n.v., NY, n.v., US (photo PTBG)).

Faramea killipii Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 73. 1930. Type: COLOMBIA: Norte de Santander, *Killip & Smith 20569* (Holotype US, n.v.).

Faramea liebmannii Standl., J. Wash. Acad. Sci. 17: 343. 1927. Type: MEXICO: Oaxaca, Tepitapa, *F. Liebmann 11404* (*Liebm. Rubiaceae Mexic. 105*) (Holotype presumably C, n.v.; Isotype US).

Faramea liesneri Dwyer, Ann. Missouri Bot. Gard. 67: 167. 1980. Type: PANAMA: Panamá, road to Cartí (San Blas), 19 km north of El Llano, ca. 500 m, 13 Mar 1973, *P. Busey*

913 (Holotype MO 2106781 (photos MEXU, PTBG)).

Faramea loftonii Dwyer & Hayden, Phytologia 15: 56. 1967. Type: PANAMA: Panamá, Cerro Jefe, in *Clusia* forest, 2700–3000 ft., 27 Jan 1966, *E. L. Tyson, J. D. Dwyer & K. Blum 3323* (Holotype MO 1824505 (photo PTBG); Isotype MO (photo PTBG)).—**Coussarea loftonii** (Dwyer & Hayden) Dwyer

Faramea luteovirens Standl., Contr. U.S. Natl. Herb. 18: 138. 1916. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre de Dios), 10–104 m, Aug 1911, *H. Pittier 4098* (Holotype US 679194 (photos MEXU, PTBG)).

Faramea multiflora A. Rich., Mém. Soc. Hist. Nat. Paris 5: 176. 1834. Type: FRENCH GUIANA: *Richard s.n.* (Holotype presumably P, n.v.).

Faramea myrticifolia Dwyer in W. C. Burger & C. M. Taylor, Fieldiana: Bot., n.s. 33: 134. 1993. Type: COSTA RICA: Limón, Las Brisas de Pacuarito, Siquirres, 300 m, 18 Apr 1985, *L. D. Gómez, C. Herrera, E. Herrera & W. Murillo 23401* (Holotype CR, n.v.; Isotype MO 3648258 (photo PTBG)).

Faramea occidentalis (L.) A. Rich., Mém. Soc. Hist. Nat. Paris 5: 176. 1834. *Ixora occidentalis* L., Syst., ed. 10, 2: 893. 1759. Type: JAMAICA: Based on P. Browne, Hist. Jam. *t. 6, f. 2* (LINN, n.v.), and Plumier, Icon. *tab. 156, f. 2* (ed. Burmannus). Steyermark (1974: 947) suggested the type was from Jamaica, thus selecting the Browne reference over that of Plumier within the references given by Linnaeus.

Faramea ovalis Standl., Contr. U.S. Natl. Herb. 18: 138. 1916. Type: PANAMA: Chiriquí, forests along Río Ladrillo and vicinity, above El Boquete, 1200–1300 m, *W. R. Maxon 5397* (Holotype US 675764 (photos MEXU, PTBG)).

Faramea papirifolia (Standl. ex Steyerm.) C. M. Taylor, Novon 6: 210. 1996. *Cephaëlis papirifolia* Standl. ex Steyerm., Acta Biol. Venez. 4: 21. 1964. Type: COLOMBIA: Valle, Río Calima (región del Chocó), margen derecha, lomas frente a quebrada de la Brea, 30–50 m, 18, 22 May 1946, *J. Cuatrecasas 21078* (Holotype US 2825318, n.v.; Isotypes COL, n.v., VEN, n.v.).

Faramea papulata Dwyer & Hayden, Phytologia 15: 57. 1967. Type: PANAMA: Panamá, Cerro Jefe, in *Clusia* forest, 2700–3000 ft., 27 Jan 1966, *E. L. Tyson, J. Dwyer & K. Blum 3284* (Holotype MO 1831279 (photos MEXU, PTBG)).

Faramea parvibracteata Steyerm., Mem. New York Bot. Gard. 17: 376. 1967. Type: VENEZUELA: Terr. Fed. Amazonas, Caño Tamatama, Río Orinoco, 150 m, 12 Sep 1954, *S. Silverio Level 145* (Holotype NY, n.v.).

Faramea pauciflora Dwyer, Ann. Missouri Bot. Gard. 67: 172. 1980. Type: PANAMA: Veraguas, Valley of Río Dos Bocas along road between Escuela Agrícola Alta Piedra and Calovébora, 15.6 km northwest of Santa Fé, 450–550 m, 31 Aug 1974, *T. B. Croat 27575* (Holotype MO 2201361 (photo PTBG); Isotype MO (photo PTBG)).

Faramea permagnifolia Dwyer ex C. M. Taylor, Novon 6: 298, *fig. 1B*. 1996. Type: COSTA RICA: Puntarenas, Osa Peninsula, in forest ca. 9 km W of Rincón on road to Rancho Quemado, 8°39'N, 83°32'W, 200 m, 26 May 1986, *B. Hammel, M. Grayum & G. de Nevers 15212* (Holotype CR, n.v.; Isotypes MO 4658114, MO 4658115).

Faramea quercetorum Standl., J. Wash. Acad. Sci. 18: 168. 1928. Type: COSTA RICA: San José, oak forest near Quebradillas, north of Santa María de Dota, 1800 m, 24 Dec 1925, *P. C. Standley 42999* (Holotype US 1253066 (photos MEXU, PTBG)).—**Faramea ovalis** Standl.

Faramea sanblasensis C. M. Taylor, Novon 6: 300, *fig. 1A*. 1996. Type: PANAMA: Comarca de San Blas, Cerro Brewster, headwaters of Río Cangandí, 9°18'N, 79°16'W, 630 m, 24 Apr 1985, *G. de Nevers, H. Herrera, B. Hammel & S. Charnley 5491* (Holotype PMA 38230, n.v.; Isotype MO 4658117).

Faramea scalaris Standl., Contr. U.S. Natl. Herb. 13: 139. 1916. Type: PANAMA: Chiriquí, humid forest between Altos de las

Palmas and top of Cerro de la Horqueta, 2100–2268 m, 18 Mar 1911, *H. Pittier 3265* (Holotype US 677656 (photos MEXU, PTBG)).

Faramea schultesii Standl., Bot. Mus. Leafl. Harvard Univ. 9: 194. 1941. Type: MEXICO: Oaxaca, Distr. Choapam [Choapan], Cerro de Lalana, near San Juan Lalana, in forest, long. 95°45', lat. 17°25', 1300 m, 11 May 1939, *R. E. Schultes & B. P. Reko 855* (Holotype F 1016864 (photo PTBG)).

Faramea sessifolia P. H. Allen, Rain Forests Golfo Dulce 409. 1956. Type: COSTA RICA: Esquinas Forest, area between the Río Esquinas and Palmar, 200 ft., 22 May 1950, *P. H. Allen 5539* (Holotype US 2215891 (photos MEXU, PTBG); Isotypes F, 2 sheets).

Faramea standleyana L. O. Williams, Phytologia 26: 490. 1973. Type: GUATEMALA: Izabal, Cerro San Gil, rocky slopes along Río Frío, 75 m, 17 Dec 1941, *J. A. Steyermark 39962* (Holotype F 1134267 (photo PTBG)).—**Faramea occidentalis** (L.) A. Rich.

Faramea stenophylla Standl., J. Wash. Acad. Sci. 18: 169. 1928. Type: HONDURAS: Cuyamel, on hills, 29 Mar 1924, *M. A. Carleton 592* (Holotype US 1208399 (photos MEXU, PTBG)).

Faramea stenura Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 331. 1929. Type: HONDURAS: Dept. Atlántida, in wet forest near summit of mountains above Lancetilla Valley, 600 m, 13 Mar 1928, *P. C. Standley 56743* (Holotype F 581582 (photo PTBG); Isotype US 1409383 (photos MEXU, PTBG)).

Faramea suerrensis (Donn. Sm.) Donn. Sm., Bot. Gaz. (Crawfordsville) 44: 112. 1907. *Faramea trinervia* K. Schum. & Donn. Sm. var. *suerrensis* Donn. Sm., Bot. Gaz. (Crawfordsville) 31: 115. 1901. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Feb 1896, *J. D. Smith 6589* (Holotype US 943626 (photos MEXU, PTBG); Isotype US 943624 (photos MEXU, PTBG)).

Faramea talamancarum Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 332. 1929. Type: PANAMA: Talamanca Valley, 3 Feb 1921, *M. A. Carleton 135* (Holotype F 578962 (photo PTBG); Isotype US (photos MEXU, PTBG)).—**Faramea multiflora** A. Rich.

Faramea terryae Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 189. 1940. Type: PANAMA: Darién, Chepigana Distr., Caná–Cuasí Trail (Camp 2), 3000 ft., 10 Mar 1940, *M. E. Terry & R. A. Terry 1479* (Holotype F 1034536 (photo PTBG); Isotype MO (photo PTBG)).

Faramea trinervia K. Schum. & Donn. Sm., Bot. Gaz. (Crawfordsville) 31: 115. 1901. Type: COSTA RICA: Talamanca, forêts de la Boca de Zhorquín, Mar 1894, *A. Tonduz 8571* (Holotype US 943623 (photos MEXU, PTBG)).

Faramea trinervia K. Schum. & Donn. Sm. var. *suerrensis* Donn. Sm., Bot. Gaz. (Crawfordsville) 31: 115. 1901. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Feb 1896, *J. D. Smith 6589* (Holotype US 943626 (photos MEXU, PTBG); Isotype US 943624 (photos MEXU, PTBG)).—**Faramea suerrensis** (Donn. Sm.) Donn. Sm.

Faramea woodsonii Standl., Ann. Missouri Bot. Gard. 28: 470. 1921. Type: PANAMA: Coclé, North rim of El Valle de Antón, near Cerro Turega, 650–700 m, 30 Jun 1940, *R. E. Woodson, Jr. & R. W. Schery 164* (Holotype F 1085608 (photo PTBG); Isotypes F, GH, n.v., MO (photo PTBG)).

Faramea zetekii Standl., Contr. Arnold Arbor. 5: 147. 1933. Type: PANAMA: Canal Zone, Barro Colorado Island, shore of cove W of Fuertes House, 21 Feb 1932, *R. H. Woodworth & P. A. Vestal 641* (Holotype A, n.v.; Isotypes F, MO (photo PTBG)).—**Faramea occidentalis** (L.) A. Rich.

Ferdinandusa Pohl, Pl. Bras. Icon. Descr. 2: 8. 1828–1829. (Substitute name for *Ferdinandea* Pohl, 1827, not *Ferdinanda* Lagasca, 1816). Type: Ferdinandusa speciosa Pohl

Ferdinandusa panamensis Standl. & L. O. Williams, Ceiba 3: 34. 1952. Type: PANAMA: Bocas del Toro, vicinity of Chiriquí Lagoon, Fish Creek, 15 Apr 1941, *H. von Wedel 2232* (Holotype F 1120423 (photo PTBG); Isotypes GH, n.v., MO, US (photos MEXU, PTBG)).

Froelichia Vahl, Eclog. Amer. 1: 3. 1796. Type: Froelichia paniculata Willd. [Herein treated as a synonym of *Coussarea* Aubl.]

Froelichia paniculata Vahl, Eclog. Amer. 1: 3. 1796. Type: TRINIDAD: *Rynan s.n.* (C, n.v.). —**Coussarea paniculata** (Vahl) Standl.

Galianthe Griseb., Abh. Königl. Ges. Wissensch. Göttingen 24: 157. 1879. Type: Galianthe fastigiata Griseb.

Galianthe brasiliensis (Spreng.) E. L. Cabral & Bacigalupo subsp. **angulata** (Benth.) E. L. Cabral & Bacigalupo, Ann. Missouri Bot. Gard. 84: 863. 1997. *Triodon angulatum* Benth., Pl. Hartweg. 70. 1840. Type: MEXICO: Oaxaca, Teotolcingo in montibus Chinantla, *T. Hartweg 507* (Holotype K, n.v.). *Diodia, Triodon*.

Galium L., Sp. Pl. 1: 105. 1753. Type: Galium verum L. Nom. et typ. cons. prop. (see Jarvis, Taxon 41: 563. 1992).

Galium aculeolatum Dempster, Univ. Calif. Publ. Bot. 64: 27. 1973. Type: MEXICO: Baja California del Sur, north ridge of Cerro Azufre, *R. Moran 18755* (Holotype UC 200580, n.v.).

Galium andrewsii A. Gray, Proc. Amer. Acad. Arts 6: 537. 1865. Syntypes: U.S.A.: California, without precise locality, *Andrews s.n.* (GH, n.v.), *Shelton s.n.* (GH, n.v.).

Galium angulosum A. Gray, Proc. Amer. Acad. Arts 11: 74. 1876. Type: MEXICO: Baja California, Guadalupe Island, 1875, *E. Palmer 36* (Holotype GH, n.v.; Isotypes MO, 2 sheets (photos MEXU, PTBG), NY, n.v., UC, n.v.).

Galium angustifolium Nutt. in Torr. & A. Gray, Fl. N. Amer. 2: 22. 1841. Type: U.S.A.: California, San Francisco (probably from southern California), *Douglas* (Holotype PH, n.v.).

Galium aschenbornii S. Schauer, Linnaea 20: 701. 1847. Type: MEXICO: Hidalgo, Zimapan, *Aschenborn 92* (Holotype presumably B, n.v., fragment JE, n.v.).

Galium aparine L., Sp. Pl. 108. 1753. Type: EUROPE: (LINN, n.v.). Naturalized in northern Mexico.

Galium carmenicola Dempster, Madroño 23: 313. 1974. Type: MEXICO: Coahuila, Mina El Popo, ca. 2 km south of Cañón El Diablo on east slope of Sierra del Carmen, *M. Johnston et al. 11921* (Holotype UC, n.v.; Isotypes MEXU, TEX, n.v.).

Galium carterae Dempster, Brittonia 22: 184. 1970. Type: MEXICO: Baja California del Sur, Sierra de la Giganta, head of south branch of Cañada de Teojo in vicinity of Portezuelo de Peloteado (southwest of Notrí), *A. Carter & Medellín-Leal 4656* (Holotype UC, n.v.).

Galium coronadoense Dempster, Univ. Calif. Publ. Bot. 64: 31. 1973. Type: MEXICO: Coronado Islands, South Island, *R. Moran 8317* (Holotype UC M243903, n.v.; Isotypes DS, n.v., RSA, n.v., SD, n.v.).

Galium correllii Dempster, Sida 3: 249. 1968. Type: U.S.A.: Texas, Val Verde Co., Eagle Nest (Langtry) Canyon, E edge of Langtry, 9 May 1967, *D. S. Correll 34155* (Holotype UC, n.v.; Isotypes ENCB, TEX-LL, n.v., US (photo PTBG)).

Galium dempsterae B. L. Turner, Madroño 30: 31. 1983. Type: MEXICO: Nuevo León, NW slope of Cerro Peña Nevada, ca. 7 km NE of San Antonio Peña Nevada (ca. 30 km NW of Doctor Arroyo), Jul 1977, *C. Wells & G. Nesom 514* (Holotype TEX-LL, n.v.).

Galium denticulatum Bartl. ex DC., Prodr. 4: 612. 1830. Type: MEXICO: Hidalgo, Real del Monte, *Haenke* (Holotype presumably PR, n.v.; Isotypes GOET, n.v., W, n.v.).

Galium diabolense Dempster, Univ. Calif. Publ. Bot. 64: 28. 1973. Type: MEXICO: Baja California, Cañón del Diablo, N and W of Picacho del Diablo, E flank of Sierra San Pedro Mártir, 4000 ft., 14 Jun 1954,

Chambers 571 (Holotype UC M034766, n.v.; Isotype DS, n.v.).

Galium fendleri A. Gray, Pl. Fendl. 60. 1849. Type: U.S.A.: New Mexico, Santa Fe Co., valley of Santa Fe Creek, *Fendler 288* (Holotype GH, n.v.; Isotypes DS, n.v., UC, n.v.).

Galium fuscum M. Martens & Galeotti, Bull. Acad. Bruxelles 11: 126. 1844. Type: MEXICO: Oaxaca, cordillera, *H. Galeotti 2633* (Holotype BR, n.v.; Isotype K, n.v.).

Galium fuscum M. Martens & Galeotti subsp. **altiplanicum** Dempster, Univ. Calif. Publ. Bot. 64: 16. 1973. Type: MEXCICO: Jalisco, near Guadalajara, *C. G. Pringle 5046* (Holotype GH, n.v.; Isotype MEXU).

Galium fuscum M. Martens & Galeotti subsp. **guerrericum** Dempster, Univ. Calif. Publ. Bot. 64: 19. 1973. Type: MEXICO: Guerrero, between Chilapa and Tixtla, 5200–7000 ft., *E. W. Nelson 2166* (Holotype US, n.v.; Isotype GH, n.v.).

Galium fuscum M. Martens & Galeotti subsp. **hypadenium** (S. Schauer) Dempster, Univ. Calif. Publ. Bot. 64: 16. 1973. *Galium hypadenium* S. Schauer, Linnaea 20: 700. 1847. Type: MEXICO: Puebla, dry limestone ledges near Tehuacan, 5000 ft., 27 Aug 1897, *C. G. Pringle 6694* (Neotype UC 102526, n.v.; Isoneotypes BM, n.v., F, GH, n.v., K, n.v., MEXU, MICH, n.v., MO (photos MEXU, PTBG), NY, n.v., US; designated by Dempster, 1973a).

Galium galeottianum Walp., Rep. Bot. Syst. 6: 17. Sept. 1846, nom. superfl. Based on *Rubia acuminata* M. Martens & Galeotti, Bull. Acad. Roy. Belg. 11: 127. 1844. Not *Galium acuminatum* Ball, 1873. Type: MEXICO: Puebla, Tehuacan, 5000 pieds, *H. Galeotti 2362* (Lectotype K, n.v.; Isolectotype P, n.v. (photo MO); designated by Dempster, 1973a).—**Galium aschenbornii** S. Schauer

Galium geminiflorum M. Martens & Galeotti, Bull. Acad. Bruxelles 11: 126. 1844. Type: MEXICO: Veracruz, régiones du pic d'Orizaba, vers 9500 pieds, *H. Galeotti 2604* (Holotype BR, n.v.; Isotype K, n.v.). —**Galium aschenbornii** S. Schauer

Galium glaberrimum Hemsl., Diag. Pl. Nov. Mexic. 3: 53. 1878. Type: MEXICO: Without precise locality, *Rubiaceae Mexic. Liebmann 220* (= *Liebmann Pl. Mex. 11426*) (Holotype K, n.v.; Isotype US (photos MEXU, PTBG)).

Galium hypadenium S. Schauer, Linnaea 20: 700. 1847. Type: MEXICO: Without precise locality, *Aschenborn 396* (Holotype B, n.v., presumably destroyed). Neotype: MEXICO: Puebla, dry limestone ledges near Tehuacán, 5000 ft., 27 Aug 1897, *C. G. Pringle 6694* (UC 102526, n.v.; Isoneotypes BM, n.v., F, GH, n.v., K, n.v., MEXU, MICH, n.v., MO (photos MEXU, PTBG), NY, n.v., US; designated by Dempster, 1973a).—**Galium fuscum** M. Martens & Galeotti subsp. **hypadenium** (S. Schauer) Dempster

Galium hypocarpium (L.) Endl. ex Griseb., Fl. Brit. W. I. 4: 351. 1861. *Valantia hypocarpia* L., Syst. Nat., ed. 10, 1307. 1759. Type: JAMAICA: Rubia I, Browne, Hist. Jamaica 141 (LINN, n.v.). *Galium hypocarpium* (L.) Fosberg, Sida 2: 386. 1966, redundant combination. *Relbunium*.

Galium hystricocarpum Greenm., Proc. Amer. Acad. Arts 33: 464. 1898. Type: MEXICO: Chihuahua, cool cliffs and ledges, mountains near Chihuahua, 23 Oct 1886, *C. G. Pringle 741* (Holotype US 19277 (photos MEXU, PTBG); Isotypes BM, n.v., GH, n.v., K, n.v., MEXU, MO (photos MEXU, PTBG), NY, n.v., RSA, n.v., TEX-LL, n.v., UC, n.v., US, 2 sheeets (photos MEXU, PTBG)).

Galium iltisii Dempster, Univ. Calif. Publ. Bot. 73: 8, *fig. 1*. 1978. Type: MEXICO: Guerrero, Sierra Madre del Sur, along the Milpillas-Atoyac road, ca. 13 mi NE of Puerto del Gallo, *J. Reveal et al. 4306* (Holotype UC 1415881, n.v.).

Galium jalapense Schltdl., Linnaea 9: 591. 1834. Type: MEXICO: Veracruz, in sylvis umbrosis Jalapae, *Schiede & Deppe 247* (Holotype HAL, n.v.; Isotypes BM, n.v., MO (photos MEXU, PTBG)).—**Galium triflorum** Michx.

Galium juniperinum Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 114. 1940. Type: MEXICO: Nuevo León, Mun. Galeana, within

1 mi of Galeana, earth wall of canyon, 5400 ft., 4 Aug 1939, *V. H. Chase 7772* (Holotype F 1002599 (photo PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG), NY, n.v., TEX-LL, n.v., US (photos MEXU, PTBG)).

Galium lacriforme Dempster, Madroño 23: 108. 1975. Type: MEXICO: Nuevo León, in oak-pine forest 8 mi east of Dulces Nombres, 1550 m, 18 Jun 1948, *F. G. Meyer & D. J. Rogers 2586* (Holotype MO 1597282 (photos MEXU, PTBG); Isotypes BM, n.v., BR, n.v., GH, n.v.).

Galium leucotrichum Hemsl., Diagn. Pl. Nov. Mexic. 53. 1880. Syntypes: MEXICO: Veracruz, region of Orizaba, *Muller 174* (K, n.v., GH, n.v.), *Bourgeau 3125* (K, n.v., P, n.v., fragment F), *Sumichrast 514* (K, n.v.); Puebla, Tehuacan, *F. Liebmann 238* (K, n.v.). —**Galium fuscum** M. Martens & Galeotti subsp. **hypadenium** (S. Schauer) Dempster

Galium martirense Dempster & Stebbins, Univ. Calif. Publ. Bot., 46: 50. 1968. Type: MEXICO: Baja California, the Oaks Pasture, NE Meling Ranch (Rancho San José), east of San Telmo, 5600 ft., 3 Jun 1964, *L. T. Dempster & L. Cory 3987* (Holotype UC, n.v.; Isotype F (photo PTBG)).

Galium mechudoense Dempster, Univ. Calif. Publ. Bot. 73: 15. 1978. Type: MEXICO: Baja California del Sur, vicinity of Cerro Mechudo, on talus and steep eastern escarpment south of Portezuelo de San Antonio, 1 Nov 1971, *R. Moran 18852* (Holotype UC 1432117, n.v.; Isotype US (photos MEXU, PTBG)).

Galium mexicanum Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 337. 1818. subsp. **mexicanum**. Neotype: MEXICO: Guanajuato, 18 miles east of Guanajuato on road to Dolores, Hidalgo, *O. Solbrig & R. Ornduff 4540* (UC, n.v.; designated by Dempster, 1976).

Galium mexicanum Kunth subsp. **asperrimum** (A. Gray) Dempster, Madroño 23: 384. 1976. *Galium asperrimum* A. Gray, Pl. Fendl. 60. 1879. Type: U.S.A.: New Mexico, Santa Fe, *Fendler 289* (Holotype GH, n.v.; Isotypes MO, UC, n.v.).

Galium mexicanum Kunth subsp. **flexicum** Dempster, Madroño 23: 384. 1976. Type: U.S.A.: Texas, Brewster Co., Chisos Mountains, *C. H. Mueller 8281* (Holotype TEX, n.v.; Isotypes GH, n.v., MICH, n.v., NY, n.v.).

Galium mexicanum Kunth var. *glabratum* Greenm., Contr. Gray Herb., n.s. 14: 458. 1898. Type: MEXICO: Oaxaca, west slope of Mt. Zempoaltepec, 7700–8000 ft., 5–13 Jul 1894, *E. W. Nelson 583* (Holotype US 569280 (photo PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG)).—**Galium mexicanum** Kunth subsp. **mexicanum**

Galium mexicanum Kunth var. *platyphyllum* Greenm., Contr. Gray Herb., n.s. 14: 458. 1898. Type: MEXICO: Chiapas, near San Cristobal, 7000–8800 ft., 18 Sep 1895, *E. W. Nelson 3165* (Lectotype US 233084 (photo PTBG); Isolectotype MO (photos MEXU, PTBG)); designated by Dempster, 1976). —**Galium mexicanum** Kunth subsp. **mexicanum**

Galium microphyllum A. Gray, Pl. Wright. 1: 80. 1852. Type: U.S.A.: Texas, Jeff David Co., Mountains at the pass of the Limpia...and in the valley of the Limpia, Aug 1849, *C. Wright 234* (Holotype GH, n.v.; Isotype US (photo PTBG)). *Relbunium*.

Galium moranii Dempster, Brittonia 22: 190. 1970. subsp. **moranii**. Type: MEXICO: Baja California del Sur, Sierra de la Giganta, Arroyo Hondo, north side of Cerro Giganta, 840 m, 14 Oct 1966, *A. Carter & M. Sousa S. 5172* (Holotype UC, n.v.; Isotype MO (photos MEXU, PTBG)).

Galium moranii Dempster subsp. **aculeolatum** (Dempster) Dempster, Univ. Calif. Publ. Bot. 73: 19. 1978. *Galium aculeolatum* Dempster, Univ. Calif. Publ. Bot. 64: 27. 1973. Type: MEXICO: Baja California del Sur, north side of Cerro Azufre, *R. Moran 18755* (Holotype UC, n.v.; Isotype SD, n.v.).

Galium nelsonii Greenm., Proc. Amer. Acad. Arts 33: 460. 1898. Type: MEXICO: Oaxaca, summit of Mt. Zempoaltepec, 11400 ft., 9 Jul 1894, *E. W. Nelson 628* (Holotype US 569281

(photos MEXU, PTBG); Isotype GH, n.v.). —**Galium uncinulatum** DC.

Galium nuttalii A. Gray, Pl. Wright. 1: 80. 1852. Based on Galium suffruticosum Torr. & A. Gray, Fl. N. Am. 2: 21. 1841. Not Galium suffruticosum Hook. & Arn., 1833. Type: U.S.A.: California, San Diego, *Nuttall s.n.* (Holotype GH, n.v.).

Galium nuttallii subsp. *ovalifolium* (Dempster) Dempster & Stebbins, Univ. Calif. Publ. Bot. 46: 37. 1968. Based on *Galium nuttallii* A. Gray var. *ovalifolium* Dempster, Brittonia 10: 183. 1958. Not *Galium ovalifolium* Schott f. ex Schult., 1827. Type: U.S.A.: California, Humboldt Co., Blue Slide, Van Duzen River, *Tracy 6816* (Holotype JEPS, n.v.).—**Galium porrigens** Dempster

Galium obstipum Schltdl., Linnaea 9: 592. 1834. Type: MEXICO: Veracruz, in sylvis umbrosis Jalapae, May 1829, *Schiede & Deppe 248* (Holotype HAL (n.v.); Isotypes MO (photos MEXU, PTBG), NY, n.v., P, n.v. (photo MO), fragment F, W, n.v.).—**Galium uncinulatum** DC.

Galium oresbium Greenm., Proc. Amer. Acad. Arts 33: 462. 1898. Type: MEXICO: Nuevo León, Sierra de la Silla, dry mountain walls, 16 Jul 1889, *C. G. Pringle 2542* (Holotype US 19288 (photos MEXU, PTBG); Isotypes BR, n.v., F, GH, n.v., M, n.v., MEXU, MO (photos MEXU, PTBG), NY, n.v., RSA, n.v., US, n.v.).

Galium orizabense Hemsl., Diag. Pl. Nov. Mexic. 3: 54. 1878. Type: MEXICO: Veracruz, Orizaba, *Botteri 838* (Lectotype K, n.v; Isolectotypes BM, n.v., P, n.v., fragment F; designated by Dempster, 1978.)

Galium pendulum Greenm., Proc. Amer. Acad. Arts 41: 249. 1905. Type: MEXICO: Hidalgo, hanging (5–8 ft.) from wet cliffs and banks, barranca below Trinidad Iron Works, 5200 ft., 6 May 1904, *C. G. Pringle 8985* (Holotype US 461457; Isotypes BM, n.v., CAS, n.v., GH, n.v., K, n.v., M, n.v., MEXU, MO (photos MEXU, PTBG), NY, n.v., PH, n.v., POM, n.v., UC, n.v., US 1133652 (photos MEXU, PTBG)).

Galium pennellii Dempster, Univ. Calif. Publ. Bot. 73: 31. 1978. Type: MEXICO: San Luis Potosí, Sierra Madre Oriental, Alvarez, Sierra de Alvarez, rocky crevices of limestone, 2200–2400 m, 30–31 Jul 1934, *W. Pennell 17853* (Holotype PH, n.v.; Isotypes F (photo PTBG), MEXU, MICH, n.v., NY, n.v.).

Galium porrigens Dempster, Madroño 22: 313. 1974. Based on *Galium nuttallii* A. Gray var. *ovalifolium* Dempster, Brittonia 10: 183. 1958. Not *Galium ovalifolium* Schott ex Schult. & Schult f., 1827. Type: U.S.A.: California, Humboldt Co., Blue Slide, Van Duzen River, *Tracy 6816* (Holotype JEPS, n.v.).

Galium praetermissum Greenm., Proc. Amer. Acad. Arts 32: 306. 1897. Type: MEXICO: Distr. Federal, pine woods, base of Sierra de Ajusco, 8000 ft., 19 Sep 1896, *C. G. Pringle 6596* (Holotype US 287866 (photos MEXU, PTBG); Isotypes CAS, n.v., ENCB, F, GH, n.v., M, n.v., MEXU, MO (photos MEXU, PTBG), NY, n.v., UC, n.v., US, 2 sheets).

Galium pringlei Greenm., Proc. Amer. Acad. Arts 33: 458. 1898. Type: MEXICO: Nuevo León, shaded ledges of the Sierra Madre near Monterrey, 9 Jul 1888, *C. G. Pringle 1884* (Holotype US 19276 (photos MEXU, PTBG); Isotypes BM, n.v., BR, n.v., GH, n.v., K, n.v., M, n.v., MO (photos MEXU, PTBG), NY, n.v., RSA, n.v., UC, n.v.).

Galium proliferum A. Gray, Pl. Wright. 2: 67. 1853. Based on Galium virgatum var. diffusum A. Gray, Pl. Wright. 1: 80. 1852. Not *Galium diffusum* Clas in Gay, 1848. Type: U.S.A.: Texas, high, rocky hills of the Pecos, Jun 1851, *C. Wright 1112* (Holotype GH, n.v.; Isotypes GH, n.v., MO (photos MEXU, PTBG), UC, n.v., US (photo PTBG)).

Galium quichense Dempster, Phytologia 26: 12. 1973. Type: GUATEMALA: Quiché, near junction of Nebaj road with road between Sacapulas and Cunen, *Proctor 25139* (Holotype TEX-LL, n.v.; Isotypes IJ, n.v., UC, n.v.).

Galium repens Sessé & Moç., Fl. Mexic. 24. 1893. Type: MEXICO: Habitat in pratis arenosis de Calpulalpam, *Sessé & Moçiño s.n.*

(presumably MA, n.v.).—**Status uncertain**, probably **Galium microphyllum** A. Gray

Galium rothrockii A. Gray, Proc. Amer. Acad. Arts 17: 203. 1882. Type: U.S.A.: Arizona, Camp Crittenden, *Rothrock 675* (Holotype GH, n.v.; Isotype NY, n.v.).—**Galium wrightii** A. Gray

Galium rzedowskii Dempster, Bol. Soc. Bot. México 35: 13. 1975. Type: MEXICO: San Luis Potosí, Aguaje de Garcías, 10 km al oeste de Guadalcázar, *J. Rzedowski 4693* (Holotype ENCB; Isotype MEXU).

Galium seatonii Greenm., Proc. Amer. Acad. Arts 33: 460. 1898. Type: MEXICO: Distr. Federal, Serranía de Ajusco, 10000 ft., 6 Sep 1896, *C. G. Pringle 6461* (Lectotype US 96421 (photos MEXU, PTBG); Isolectotypes B, n.v., GH, n.v., MEXU, MO (photos MEXU, PTBG), NY, n.v., PH, n.v., UC, n.v.; designated by Dempster, 1978).

Galium sphagnophilum (Greenm.) Dempster, Phytologia 26: 221. 1973. *Relbunium sphagnophilum* Greenm., Proc. Amer. Acad. Arts 33: 468. 1898. Type: MEXICO: Oaxaca, Sierra de Clavellinas, *C. G. Pringle 5812* (Holotype GH, n.v.).

Galium sphagnophilum (Greenm.) Dempster var. **mazocarpum** (Greenm.) Dempster, Phytologia 26: 222. 1973. *Relbunium mazocarpum* Greenm., Proc. Amer. Acad. Arts 41: 250. 1905. Type: MEXICO: Hidalgo, moist banks, barranca below Trinidad Iron Works, 5500 ft., 6 May 1904, *C. G. Pringle 8834* (Holotype GH, n.v.; Isotypes MEXU, UC, n.v., US (photos MEXU, PTBG)).

Galium stellatum Kellogg, Proc. Calif. Acad. 2: 97, *fig. 26*. 1861. [1863]. Type: MEXICO: Baja California, Cedros Island, *Veatch s.n.* (Holotype CAS, n.v.).

Galium suffruticosum Nutt. in Torr. & A. Gray, Fl. N. Amer. 2: 21. 1841. Hom. Illeg. Not *Galium suffruticosum* Hook. & Arn., 1833. Type: U.S.A.: California, San Diego, *Nuttall s.n.* (Holotype GH, n.v.).—**Galium nuttallii** A. Gray subsp. **nuttallii**.

Galium trifidum L., Sp. Pl. 1: 105. 1753. Type: CANADA: *Kalm* (presumably LINN, n.v.).

Galium triflorum Michx., Fl. 1: 80. 1803. Type: CANADA: Location and collector unknown (presumably P, n.v.).

Galium uncinulatum DC., Prodr. 4: 600. 1830. Type: MEXICO: Between Tampico and Real del Monte, *Berlandier 342* (Holotype G-DC, n.v. (microfiche 4: 600.55); Isotype W, n.v.).

Galium uncinulatum DC. var. *nanum* Greenm., Proc. Amer. Acad. Sci. 33: 459. 1898. Type: MEXICO: Veracruz, Orizaba, *Müller 1523* (Holotype NY, n.v.; Isotype GH, n.v.).—**Galium orizabense** Hemsl.

Galium uropetalum Hemsl., Biol. Centr.-Amer., Bot. 2: 66. 1881, nom. superfl. Based on *Rubia acuminata* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 127. 1844. Not *Galium acuminatum* Ball, 1873. Type: MEXICO: Puebla, Tehuacan, 5000 ft., *H. Galeotti 2362* (Lectotype K, n.v.; Isolectotype P, n.v. (photo MO); designated by Dempster, 1973b).—**Galium aschenbornii** S. Schauer

Galium volcanense Dempster, Univ. Calif. Publ. Bot. 64: 27. 1973. Type: MEXICO: Baja California del Sur, north ridge of Cerro Azufre, *R. Moran 18753* (Holotype UC 1380662, n.v.; Isotype GH, n.v.).

Galium wigginsii Dempster, Brittonia 22: 188. 1970. Type: MEXICO: Baja California, meadow at La Encantada, Sierra San Pedro Mártir, 2200 m, 18 Sep 1930, *I. L. Wiggins & D. Demaree 4879* (Holotype UC, n.v.; Isotypes DS, n.v., F (photo PTBG), GH, n.v., NY, n.v., US (photos MEXU, PTBG)).

Galiium wrightii A. Gray, Pl. Wright. 1: 80. 1852. Type: U.S.A.: Texas, Jeff Davis Co., pass of the Limpia, Aug 1849, *C. Wright 235* (Holotype GH, n.v.; Isotype NY, n.v.).

Galium wrightii A. Gray var. *latifolium* B. L. Rob. & Fernald, Proc. Amer. Acad. Arts 30: 116. 1894. Type: MEXICO: Sonora, Sierra de las Gronillas, 5800 ft., 2 Oct 1890, *C. V. Hartman 58* (Holotype GH, n.v.; Isotypes BM, n.v., F, n.v., NY, n.v., UC, n.v., US (photos MEXU, PTBG)).—**Galium wrightii** A. Gray

Galium wrightii A. Gray var. *rothrockii* (A. Gray) Ehrend., Contr. Dudley Herb. 5: 99. 1958. *Galium rothrockii* A. Gray, Proc. Amer.

Acad. Arts 17: 203. 1882. Type: U.S.A.: Arizona, Camp Crittenden, *Rothrock 675* (Holotype GH, n.v.; Isotype NY, n.v.). —**Galium wrightii** A. Gray

Garapatica H. Karst., Linnaea 30: 143. 1859. Type: Garapatica edulis H. Karst.
Garapatica edulis (L. C. Rich.) H. Karst., Fl. Columb. 1: 57, *t. 28*. 1860. *Genipa edulis* L. C. Rich., Actes Soc. Hist. Nat. Paris 1: 107. 1792. Type: FRENCH GUIANA: Guyana, *Richard s.n.* (Holotype P, n.v.; Isotype F 971706 (photo PTBG)).—**Alibertia edulis** (L. C. Rich.) A. Rich.

Gardenia J. Ellis, Phil. Trans. 51: 935, *t. 23*. 1761 (nom. cons.). Type: Gardenia jasminoides J. Ellis
Gardenia armata Sw., Prodr. Fl. Veg. Ind. Occ. 51. 1788. Type: COLOMBIA: Cartagena, *Jacquin s.n.* (Lectotype: Swartz's plate; designated by Taylor & Lorence, 1993). —**Randia armata** (Sw.) DC.
Gardenia augusta (L.) Merr., Interpret. Rumph. Herb. Amboin. 485. 1917. *Varneria augusta* L., Amoen. Acad. 4: 136. 1759. Type: Not cited; the description and illustration may be taken as the type according to Smith (1974). Frequently cultivated in Mexico and Mesoamerica.
Gardenia edulis (Rich.) Poir. in Lam., Encycl. Méth. Bot. Suppl. 2: 708. 1812. *Genipa edulis* Rich., Act. Soc. Hist. Nat. Paris 1: 107. 17792. Type: FRENCH GUIANA: Guyane, without precise locality, *Richard s.n.* (Holotype P, n.v.; Isotype F 971706 (photo PTBG)).—**Alibertia edulis** (Rich.) A. Rich.
Gardenia laccifera Sessé & Moç., Fl. Mexic., ed. 2, 54. 1894. Type: MEXICO: Habitat in Ayecapixtla haud procul ab Eclesia. Floret Aprili, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain**, probably **Randia** sp. (protologue states twigs have paired spines).
Gardenia mexicana Sessé & Moç., Fl. Mexic., ed. 2, 54. 1894. Type: MEXICO: Habitat in Ayacapixtla. Floret Aprili, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain,** probably **Randia** sp. (protologue states twigs have 4 spines).
Gardenia schiedeana Schltdl., Linnaea 9: 601. 1834. Type: MEXICO: Veracruz, prope Actopan, *Schiede s.n.* (presumably HAL, n.v.).—**Status uncertain**, possibly synonymous with **Randia monantha** Benth. (1841); perhaps the oldest available epithet for this species.

Genipa L., Syst. Nat., ed. 10, 2: 931. 1759. Type: Genipa americana L.
Genipa americana L., Syst. Nat., ed. 10, 2: 931. 1759. Lectotype: BRAZIL: Janipaba Piso & Marcgraf, Hist. Nat. Bras. 52, *Ic*. 1648. (Lectotype designated by Howard, 1989.)
Genipa americana L. var. *caruto* (Kunth) K. Schum. in Mart., Fl. Bras. 6(6): 352. 1889. *Genipa caruto* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 407. 1820. Type: In riparia Orinoci et Fluminis Nigri, prope Caracas [VENEZUELA] et Carthagena [COLOMBIA], *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.). For typification see Steyermark, 1972: 349.—**Genipa americana** L.
Genipa caruto Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 407. 1820. Type: In riparia Orinoci et Fluminis Nigri, prope Caracas [VENEZUELA] et Carthagena [COLOMBIA], *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.). For typification see Steyermark, 1972: 349.—**Genipa americana** L.
Genipa cinerea Fernald, Proc. Amer. Acad. Arts 33: 93. 1897. Type: MEXICO: Guerrero, Acapulco and vicinity, Oct 1894–Mar 1895, *E. Palmer 348* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).—**Randia cinerea** (Fernald) Standl.
Genipa codonocalyx Standl., Contr. U.S. Natl. Herb. 17: 446. 1914. Type: COSTA RICA: Boca Matapalo, cordon littoral du Pacifique, 10 Apr 1898, *H. Pittier 12085* (Holotype US 577536 (photos MEXU, PTBG); Isotype US). —**Genipa americana** L.
Genipa curviflora Dwyer, Ann. Missouri Bot. Gard. 64: 184. 1980. Type: PANAMA:

Panamá, along El Llano-Cartí Road, 8 km north of Pan American Highway at El Llano, 450 m, 5 Mar 1974, *M. Nee & R. Warmbrodt 10347* (Holotype MO 2579400 (photo PTBG); Isotype MO (photo PTBG)).

Genipa echinocarpa (Moç. & Sessé ex DC.) A. Gray, Proc. Amer. Acad. Arts 21: 380. 1886. *Randia echinocarpa* Moç. & Sessé ex DC., Prodr. 4: 385. 1830. Type: MEXICO: Fl. Mexic. Ic. *t. 469* (calque G-DC, n.v.; copies MEXU, US). *Basanacantha*.—**Randia echinocarpa** Moç. & Sessé ex DC.

Genipa edulis Rich., Act. Soc. Hist. Nat. Paris 1: 107. 1792. Type: FRENCH GUYANA: Guyane, without precise locality, *Richard s.n.* (Holotype presumably P, n.v.; Isotype F 971706 (photo PTBG)).—**Alibertia edulis** (Rich.) A. Rich. ex DC.

Genipa maxonii Standl., J. Wash. Acad. Sci. 18: 642. 1918. Type: PANAMA: Panamá, forest along the Río Indio de Gatún, Canal Zone, near sea level, 17 Feb 1911, *W. R. Maxon 4848* (Holotype US 675223 (photos MEXU, PTBG)). *Sickingia*.—**Simira maxonii** (Standl.) Steyerm.

Genipa venosa Standl., J. Wash. Acad. Sci. 18: 168. 1928. Type: COSTA RICA: Guanacaste, El Arenal, wet forest, 485–600 m, 18–19 Jan 1926, *P. C. Standley & J. Valerio 45269* (Holotype US 1254013 (photos MEXU, PTBG); Isotype US).—**Genipa americana** L.

Genipa vulcanicola Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 213. 1937. Type: GUATEMALA: Suchitepéquez, Volcán de Atitlán, 7700 ft., 24 Oct 1934, *A. F. Skutch 1512* (Holotype F 813461 (photos MEXU, PTBG); Isotypes A, n.v., US (photos MEXU, PTBG)).—**Glossostipula concinna** (Standl.) Lorence

Genipa williamsii Standl., J. Wash. Acad. Sci. 8: 642. 1918. Type: PANAMA: Caná and vicinity, 17 Apr–8 Jun 1908, *R. S. Williams 814* (Holotype US 678301 (photos MEXU, PTBG)).

Gentiana L. [Gentianaceae]

Gentiana nigricans Lam., Encycl. 2: 645. 1788. Type: MEXICO: Collector and locality unknown, (Holotype P-JU, n.v.). *Houstonia*.—**Hedyotis nigricans** (Lam.) Fosb.

Geocardia Standl., Contr. U.S. Natl. Herb. 17: 444. 1914. Published as a substitute name for Geophila D. Don, 1825 (nom. cons.), non Bergeret, 1803 (nom. rej.). [Herein treated as a synonym of *Geophila* D. Don.]

Geocardia pleuropoda (Donn. Sm.) Standl., Contr. U.S. Natl. Herb. 17: 445. 1914. *Geophila pleuropoda* Donn. Sm., Bot. Gaz. (Crawfordsville) 52: 50. 1911. Type: GUATEMALA: Alta Verapaz, Secanquim trail to Sepaquité, 4000 ft., 5 Feb 1904, *G. P. Goll s.n.* (Holotype US 860647 (photos MEXU, PTBG)).—**Coccocypselum cordifolium** Nees & Mart.

Geophila D. Don, Prodr. Fl. Nepal. 136. 1825. Nom. cons. Not Geophila Bergeret, 1803. Type: Geophila reniformis D. Don, nom. illeg. (≡ *Geophila herbacea* (Jacq.) K. Schum.).

Geophila cordifolia Miq., Stirp. Surin. Sel. 176. 1850. Type: SURINAM: Without precise locality, *Kappler 1896* (location unknown).

Geophila croatii Steyerm., Phytologia 35: 401. 1977. Type: PANAMA: Canal Zone, Barro Colorado Island, Zetek Trail, 3 Oct 1968, *T. B. Croat 6647* (Holotype MO 1969871 (photo PTBG)).—**Geophila gracilis** (Ruiz & Pav.) DC.

Geophila gracilis (Ruiz & Pav.) DC., Prodr. 4: 537. 1830. *Psychotria gracilis* Ruiz & Pav., Fl. Peruv. 2: 63, *t. 211, fig. C*. 1799. Type: PERU: Huánuco, Pillao et Pueblo Nuevo, *Ruiz López & Pavón s.n.* (Presumably MA, n.v.).

Geophila herbacea (Jacq.) K. Schum. in Engl. & Prantl, Nat. Pflanzenfam. 4, 4: 119. 1891. *Psychotria herbacea* Jacq., Enum. Pl. Carib. 16. 1760. Type: MARTINIQUE: Without precise locality, *Jacquin* (location unknown).—**Geophila repens** (L.) I. M. Johnst.

Geophila macropoda (Ruiz & Pav.) DC., Prodr. 4: 537. 1830. *Psychotria macropoda* Ruiz & Pav., Fl. Peruv. 2: 63, *pl. 211, fig. b*. 1799. Type: PERU: Huánuco, Nemoribus secus Pillao ad Iscutunam, *Ruiz Lopéz &*

Pavón s.n. (Presumably MA, n.v.). *Coccocypselum*.
Geophila pleuropoda Donn. Sm., Bot. Gaz. (Crawfordsville) 52: 50. 1911. Type: GUATEMALA: Alta Verapaz, Secanquim, trail to Sepacuité, 4000 ft., 5 Feb 1905, *G. P. Goll s.n.* (Holotype US 860647 (photos MEXU, PTBG)). *Coccocypselum, Geocardia*. —**Coccocypselum cordifolium** Nees & Mart.
Geophila repens (L.) I. M. Johnst., Sargentia 8: 281. 1949. *Rondeletia repens* L., Syst. Nat., ed. 10, 2: 928. 1759. Type: JAMAICA: *Sloane s.n.* (Lectotype: Sloane Herb. iv.iii, n.v.; designated by Howard, 1989).
Geophila trichogyne (Muell. Arg.) Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 423. 1931. *Mapouria trichogyne* Muell. Arg. in Mart., Fl. Bras. 6: 426. 1881. Type: BRAZIL: Habitat in prov. do Alto Amazonas, prope Manaos ad Rio Negro, *Spruce s.n.* (B, presumably destroyed).—**Geophila cordifolia** Miq.

Gerontogea Cham. & Schltdl., Linnaea 4: 1154. 1829. Type: Not designated. [Herein treated as a synonym of *Hedyotis* L.]
Gerontogea deppeana Cham. & Schltdl., Linnaea 5: 169. 1830. Type: MEXICO: Veracruz, ad San Andrés, 1829, *Schiede & Deppe 391* (Holotype presumably HAL, n.v.; Isotype MO (photos MEXU, PTBG)). *Hedyotis*.—**Hedyotis microtheca** (Schltdl. & Cham.) Steud.
Gerontogea microtheca Cham. & Schltdl., Linnaea 5: 169. 1830. Type: MEXICO: Veracruz, Barranca de Tioselos, *Schiede & Deppe 390* (Holotype presumably HAL, n.v.; Isotype MO (photos MEXU, PTBG) [isotype label states in sylvis Papantla]). *Oldenlandia*. —**Hedyotis microtheca** (Schltdl. & Cham.) Steud.

Glossostipula Lorence, Candollea 41: 454. 1986. Type: Glossostipula concinna (Standl.) Lorence
Glossostipula blepharophylla (Standl.) Lorence, Candollea 41: 457. 1986. *Randia blepharophylla* Standl., Contr. U.S. Natl. Herb. 23: 1375. 1926. Type: MEXICO: Nayarit, foothills of Sierra Madre, Tepic, between Aguacate & Dolores, 6 Aug 1897, *J. N. Rose 2028* (Holotype US 300921 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).
Glossostipula concinna (Standl.) Lorence, Candollea 41: 458. 1986. *Randia concinna* Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 288. 1929. Type: MEXICO: Jalisco, San Sebastián, Hacienda del Ototal, Sierra Madre Occidental, 1500 m, 15 Feb 1937, *Y. Mexia 1690* (Holotype F 579911 (photos MEXU, PTBG); Isotypes MO (photos MEXU, PTBG), US (photos MO, US)).
Glossostipula strigosa Lorence, Novon 7: 46, *fig. 1*. 1997. Type: HONDURAS: Dept. Atlántida, base of N slope of Pico Bonito, E of new CURLA (Centro Universitario Regional del Litoral Atlántico) camp building on Quebrada Grande, ca. 1/3 km above its confluence with the Río Bonito, ca. 10 km SW of La Ceiba, Parque Nacional Pico Bonito, 15°42'N, 86°51W, 140 m, 8 May 1993, *R. Evans 1559* (Holotype MO 04585952 (photo PTBG); Isotype PTBG 16114).

Gomozia Mutis ex L. f., Suppl. Pl. 17, 129. 1781. Nom. rej. vs. Nertera J. Gaertn., 1788. Type: Gomozia granadensis L. f. [Herein treated as a synonym of *Nertera* Banks & Sol. ex C. F. Gaertn. according to the specifications of the rejection.]
Gomozia granadensis L. f., Suppl. Pl. 129. 1781. Type: America meridionali, *Mutis s.n.* (LINN 172.1, n.v.).—**Nertera granadensis** (L. f.) Druce

Gonzalagunia Ruiz & Pav., Fl. Peruv. Prodr. 12, *t. 3*. 1794. Type: Gonzalagunia dependens Ruiz & Pav.
Gonzalagunia bracteosa (Donn. Sm.) B. L. Rob., Proc. Amer. Acad. Sci. 45: 405. 1910. *Gonzalea bracteosa* Donn. Sm., Bot. Gaz. (Crawfordsville) 33: 252. 1902. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Apr 1896, *J. D. Smith 6583* (Holotype US 943468 (photos MEXU,

PTBG); Isotypes F, n.v., NY, n.v., US 943469 (photos MEXU, PTBG)). *Duggena*.

Gonzalagunia brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1302. 1938. Type: COSTA RICA: Near San Ramón, Bosque a orillas del mar de Golfito de Osa, 12 Apr 1930, *A. Brenes 12323* (Holotype F 856730 (photo PTBG); Isotypes GH, n.v., US (photos MEXU, PTBG)).

Gonzalagunia chiapasensis (Standl.) Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 283. 1940. *Rondeletia chiapasensis* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 54. 1940. Type: MEXICO: Chiapas, Cascarada, 31 Dec 1936, *E. Matuda 1064* (Holotype MICH, n.v.; Isotypes F (fragment), TEX-LL (photo PTBG)). *Rogiera*.

Gonzalagunia exaltata Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 385. 1940. Type: COSTA RICA: San José, basin of El General, beside river, 675–900 m, Mar 1940, *A. F. Skutch 4747* (Holotype F 1044350 (photo PTBG); Isotypes A, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)). —**Rondeletia brenesii** Standl.

Gonzalagunia glabra S. Watson, Proc. Amer. Acad. Arts 25: 152. 1890. Type: MEXICO: Jalisco, in the mountains near Lake Chapala, Dec 1889, *C. G. Pringle 2442* (Holotype A, n.v.; Isotype US (photo PTBG)). —**Citharexylum glabrum** (S. Watson) Greenm. (Verbenaceae)

Gonzalagunia kallunkiae Dwyer, Ann. Missouri Bot. Gard. 67: 192. 1980 [as *kallunkii*]. Type: PANAMA: Veraguas, NW of Santa Fé, 11 km Escuela Agrícola Alto de Piedra, on road to Calovébora, near Río Colovéborita, 15 Nov 1975, *S. Mori & J. Kallunki 3141* (Holotype MO 2285895 (photo PTBG)).

Gonzalagunia longithyrsa Fosberg, Sida 2: 387. 1966. Type: COSTA RICA: Cartago, Tapantí, at edge of wet forest, 1200 m, 1 Nov 1964, *W. H. Hatheway & R. L. Rodríguez 1241* (Holotype US 2562636 (photos MEXU, PTBG)).—**Gonzalagunia rosea** Standl.

Gonzalagunia nivea (Bartl. ex DC.) Kuntze, Rev. Gen. Pl. 1: 284. 1891. *Gonzalea nivea* Bartl. ex DC., Prodr. 4: 436. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 436.3). *Duggena*. —**Rondeletia buddleioides** Benth.

Gonzalagunia ovatifolia (Donn. Sm.) B. L. Rob., Proc. Amer. Acad. Arts 45: 405. 1910. *Gonzalea ovatifolia* Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 336. 1899. Type: COSTA RICA: Cartago, Atirro, 600 m, *J. D. Smith 6599* (Lectotype US 943467, designated here under main entry (photos MEXU, PTBG); Isolectotype F). Syntypes: Costa Rica, *J. D. Smith 6600* (F, n.v., GH, US); Costa Rica, *Pittier & Tonduz 9171* (US, n.v.); Panama, *Hart 113* (US, n.v.). *Duggena*.

Gonzalagunia panamensis (Cav.) K. Schum. in Mart., Fl. Bras. 6(6): 292. 1889. *Buena panamensis* Cav., An. Hist. Nat. 2: 279. 1800. Type: PANAMA: Lancón, *Née s.n.* (Holotype presumably MA, n.v.; possible Isotype F (photo PTBG)).

Gonzalagunia parviflora Cham. & Schltdl., Linnaea 6: 414. 1831. Type: MEXICO: Veracruz, Cuesta Grande de Jalacingo, *Schiede & Deppe 1275* (Holotype presumably HAL, n.v.; Isotype B, presumably destroyed (photo MO)).—**Rondeletia septicidalis** B. L. Rob., vel sp. aff.

Gonzalagunia rojasii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 114. 1940. Type: GUATEMALA: Quezaltenango, El Muro, below Santa María de Jesús, ca. 1200 m, 1 Mar 1938, *P. C. Standley 67145* (Holotype F 995085 (photo PTBG)).

Gonzalagunia rosea Standl., Ann. Missouri Bot. Gard. 25: 836. 1938. Type: PANAMA: Chiriquí, valley of the upper Río Chiriquí Viejo, 1300–1900 m, Jul–Aug 1937, *G. White & P. White 7* (Holotype F 913064 (photo PTBG); Isotypes A, n.v., MO (photo PTBG), NY, n.v.).

Gonzalagunia rudis (Standl.) Standl., J. Wash. Acad. Sci. 17: 170. 1927, comb. inval. *Duggena rudis* Standl., Contr. U.S. Natl. Herb. 18: 125. 1916. Type: PANAMA: Panamá, shady places along Chagras at El

Vigía, 12 Jan 1911, *H. Pittier 2378* (Holotype US 676602 (photos MEXU, PTBG)).

Gonzalagunia stenostachya (Standl.) W. C. Burger in W. C. Burger & C. M. Taylor, Fieldiana, Bot. 33: 150. 1993. *Rondeletia stenostachya* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1372. 1938. Type: COSTA RICA: La Hondura de San José, 1300 m, 15 Aug 1933, *M. Valerio 769* (Holotype F 681816 (photos MEXU, PTBG)).

Gonzalagunia tacanensis Lundell, Lloydia 2: 106. 1939. Type: MEXICO: Chiapas, Mt. Tacaná, 1000–2000 m, Aug 1938, *E. Matuda 2462* (Holotype TEX-LL (photos MEXU, PTBG)).—**Gonzalagunia thyrsoidea** (Donn. Sm.) B. L. Rob.

Gonzalagunia thyrsoidea (Donn. Sm.) B. L. Rob., Proc. Amer. Acad. Arts 45: 405. 1910. *Gonzalea thyrsoidea* Donn. Sm., Bot. Gaz. (Crawfordsville) 13: 188. 1888. Type: GUATEMALA: Alta Verapaz, Berge bei Pansamalá, 3800 ft., May 1887, *H. von Tuerckheim 1249* (Holotype US 941409 (photos MEXU, PTBG); Isotype GH, n.v.).

Gonzalagunia tonduzii K. Krause, Bot. Jahrb. 54, Beibl. 119: 42. 1916. Type: COSTA RICA: Cerro del Roble, ca. 2700–2900 m, Apr 1898, *A. Tonduz 11813* (Holotype B, presumably destroyed (photos F, MEXU, MO)).—**Rondeletia buddleioides** Benth.

Gonzalagunia veraguensis Dwyer, Ann. Missouri Bot. Gard. 67: 197. 1980. Type: PANAMA: Veraguas, NW of Santa Fe, 8.8 km from Escuela Agrícola Alto de Piedra, on road to Calovébora, 1900 ft., 17 Jun 1975, *S. Mori 6673* (Holotype MO 2353238 (photos PTBG); Isotype MO 2353239 (photo PTBG)).

Gonzalea Pers., Syn. Pl. 1: 132. 1805. Nom. superfl. for Gonzalagunia Ruiz & Pav. 1794 (for which it is herein treated as a synonym).

Gonzalea bracteosa Donn. Sm., Bot. Gaz. (Crawfordsville) 33: 252. 1902. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, *J. D. Smith 6583* (Holotype US 943468 (photos MEXU, PTBG); Isotypes F, n.v., NY, n.v., US 943469 (photos MEXU, PTBG)). *Duggena*.—**Gonzalagunia bracteosa** (Donn. Sm.) B. L. Rob.

Gonzalea hayesii Wernham, J. Bot. 51: 219. 1913. Type: PANAMA: In woods near Panama, *Hayes s.n.* (Holotype BM, n.v.). *Duggena*.—**Gonzalagunia panamensis** (Cav.) K. Schum.

Gonzalea nivea Bartl. ex DC., Prodr. 4: 436. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 436.3)). *Duggena*.—**Rondeletia buddleioides** Benth.

Gonzalea ovatifolia Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 336. 1899. Type: COSTA RICA: Cartago, Atirro, 600 m, *J. D. Smith 6599* (Lectotype US 943467, here designated (photos MEXU, PTBG); Isolectotype F). Syntypes: COSTA RICA: *J. D. Smith 6600* (F, n.v., GH, US); *Pittier & Tonduz 9171* (US, n.v.). PANAMA; *Hart 113* (US, n.v.). *Duggena*.—**Gonzalagunia ovatifolia** (Donn. Sm.) B. L. Rob.

Gonzalea panamensis (Cav.) Spreng., Syst. Veg. 1: 417. 1825. *Buena panamensis* Cav., Anal. Hist. Nat. (Madrid) 2: 279. 1800. Type: PANAMA: Lancón, *Née s.n.* (Holotype presumably MA, n.v.; possible Isotype F (photo MO)). *Duggena*.—**Gonzalagunia panamensis** (Cav.) K. Schum.

Gonzalea parviflora G. Don., Gen. Hist. 3: 537. 1834. Type: MEXICO: Oaxaca, 3000 ft., *H. Galeotti 7245* (Holotype presumably BM, n.v.; Isotype G-DC, n.v. (photo MO)). —**Rondeletia capitellata** Hemsl., vel. sp. aff.; perhaps the earliest available epithet for this species.

Gonzalea secunda M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 235. 1844. Type: MEXICO: Veracruz, bois humides de Xalapa, à 4000 pieds, Juin, *H. Galeotti 7077* (Holotype presumably BR, n.v.).—**Status uncertain.**

Gonzalea thyrsoidea Donn. Sm., Bot. Gaz. (Crawfordsville) 13: 188. 1888. Type: GUATEMALA: Alta Verapaz, Berge bei Pansamalá, 3800 ft., May 1887, *H. von Tuerckheim 1249* (Holotype US 941409

(photos MEXU, PTBG); Isotype GH, n.v.). *Duggena*.—**Gonzalagunia thyrsoidea** (Donn. Sm.) B. L. Rob.

Guettarda L., Sp. Pl. 2: 991. 1753. Type: Guettarda speciosa L.

Guettarda armata Bartl. ex DC., Prodr. 4: 457. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v. (fragment G-DC, n.v. (microfiche 4: 457.19)).—**Status uncertain**, probably **Chomelia spinosa** Jacq.

Guettarda brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1303. 1938. Type: COSTA RICA: Golfo de Nicoya, Isla de Caballo, Jun 1932, *A. Brenes 15694* (Holotype F 857985 (photo PTBG)).

Guettarda chiriquiensis Standl., Ann. Missouri Bot. Gard., 25: 838. 1938. Type: PANAMA: Chiriquí, Valley of upper Río Chiriquí Viejo, 1300–1900 m, 27 Jul 1937, *P. White & G. White 22* (Holotype MO 1177311 (photo PTBG); Isotypes A, n.v., F).—**Guettarda crispiflora** Vahl

Guettarda cobanensis Donn. Sm., Bot. Gaz. (Crawfordsville) 47. 255. 1909. Type: GUATEMALA: Alta Verapaz, near Cobán, 1500 m, *H. von Tuerckheim II.2096* (Holotype US 941415 (photo PTBG); Isotype US (photo PTBG)).

Guettarda colubrinoides Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 358. 1931. Type: MEXICO: Tabasco, Paso del Carrizal, 4 May 1890, *J. N. Rovirosa 787* (Holotype K, n.v., fragment F)).—**Status uncertain**, probably **Guettarda elliptica** Sw.

Guettarda combsii Urb., Symb. Antill. 6: 48. 1909. Type: CUBA: Distr. Cienfuegos, Prov. Santa Clara, prope Cieneguito, 2 Jul 1895, *R. Combs 270* (Syntype B, destroyed; Lectotype F 358073 (photo PTBG), here designated; Isolectotypes F, US). Syntype: Prov. Pinar del Río inter Candelaria et Artemisa, Sept., *Wilson 1783* (B, destroyed).

Guettarda conferta Benth., Bot. Voy. Sulphur 106. 1845. Type: COSTA RICA: Cocos Island, *Barclay s.n.* (Holotype BM, n.v.).

Guettarda crispiflora Vahl, Eclog. Amer. 1: 36, *t. 6*. 1796. Type: MONTSERRAT: Versus summitates in insula Montserrat, *Ryan s.n.* (Holotype presumably C, n.v.).

Guettarda dealbata M. Martens & Galeotti, Bull. Acad. Roy. Soc. Bruxelles 11: 232. 1844. Type: MEXICO: Oaxaca, dans les forêts épaisses et humides de Llano Verde et de Tanetze, dans le Rincon (cordillère orientale d'Oaxaca), 4000–6000 ft., *H. Galeotti 7131* (Holotype presumably BR, n.v.).—**Status uncertain**, "scarcely of this genus" according to Standley (1934).

Guettarda deamii Standl., Contr. U.S. Natl. Herb. 20: 209. 1919. Type: GUATEMALA: Zacapa, Gualán, 620 ft., 15 Jun 1909, *C. C. Deam 6271* (Holotype US 796136 (photo PTBG); Isotype GH, n.v.).

Guettarda dichotoma M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 233. 1844. Type: MEXICO: Veracruz, savanes de Consoquitla, près la colonie de Zacuapan et Mirador, 1500–2000 pieds, 1840, *H. Galeotti 2601* (Holotype presumably BR, n.v.; Isotype P (photos MEXU, PTBG)).—**Guettarda elliptica** Sw.

Guettarda elliptica Sw., Prodr. Veg. Ind. Occ. 59. 1788. Type: JAMAICA: Campestris siccis, *Swartz s.n.* (presumably S, n.v.).

Guettarda filipes Standl., Contr. U.S. Natl. Herb. 20: 210. 1919. Type: MEXICO: Durango, near Huasemote, 15 Aug 1897, *J. N. Rose 3498* (Holotype US 302475).

Guettarda foliacea Standl., Contr. U.S. Natl. Herb. 18: 139. 1916. Type: PANAMA: Canal Zone, along the Trinidad River, near sea level, 19–21 Jul 1911, *H. Pittier 4031* (Holotype US 679116; Isotype F).

Guettarda galeotti Standl., Contr. U.S. Natl. Herb. 23: 1384. 1926. Type: MEXICO: Oaxaca, Prov. Pinotepa, *H. Galeotti 2576* (Holotype US 572992, fragment F (photos MEXU, PTBG)).—**Chomelia protracta** (Bartl. ex DC.) Standl.

Guettarda gaumeri Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 58. 1930. Type: MEXICO: Yucatán, without precise locality, 1917–1921, *G. F. Gaumer 24239* (Holotype F

552244 (photos MEXU, PTBG); Isotypes A, n.v., GH, n.v., MO (photos MEXU, PTBG)). (As for other taxa described by Standley in this publication, the first specimen he cited in the protologue ("*Gaumer 24239*, Herb. Field Mus. No. 552,244") was intended to be the holotype, rather than the second one (*Lundell 352*). Consequently lectotypification is deemed unnecessary in this case.)

Guettarda insularis Brandegee, Univ. Calif. Publ. Bot. 10: 416. 1924. Type: MEXICO: Baja California, Socorro Island, Mar–Jun 1897, *A. W. Anthony 377 & F. E. Barkelmew 179* (Holotype UC 102472, n.v.; Isotypes F, GH, n.v., MO (photos MEXU, PTBG)). —**Guettarda elliptica** Sw.

Guettarda macrosperma Donn. Sm., Bot. Gaz. (Crawfordsville) 18: 204. 1893. Type: GUATEMALA: Santa Rosa, 3000 ft., May 1892, *Heyde & Lux 3160* (Holotype US 48602 (photo PTBG); Isotype US (photo PTBG)).

Guettarda odorata (Jacq.) Lam., Tabl. Encycl. Méth. 2: 219. 1819. *Laugieria odorata* Jacq., Enum. Pl. Carib. 2: 16. 1760. Type: CUBA: Ex Carthagenâ et Havanâ, *Jacquin s.n.* (Lectotype P, n.v.; designated by Steyermark, 1972: 360).

Guettarda petenensis Lundell, Wrightia 4: 124. 1969. Type: GUATEMALA: Péten, La Cumbre, in high forest, about 6 km from village, on top of hill bordering Río Pusila, 18 May 1967, *E. Contreras 6947* (Holotype TEX-LL (photos MEXU, PTBG); Isotype US).

Guettarda poasana Standl., J. Wash. Acad. Sci. 18: 182. 1928. Type: COSTA RICA: Alajuela, Viento Fresco, slopes of Volcán de Poás, 1800 m, 13 Feb 1926, *P. C. Standley & Torres 47807* (Holotype US 1305283 (photo PTBG)).

Guettarda protracta Bartl. ex DC., Prodr. 4: 457. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 457.18)).—**Chomelia protracta** (Bartl. ex DC.) Standl.

Guettarda protracta Bartl. ex DC. var. *brevipes* DC., Prodr. 4: 457. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.). *Anisomeris, Pittonioitis*.—**Chomelia protracta** (Bartl. ex DC.) Standl.

Guettarda protracta Bartl. ex DC. var. *longipes* DC., Prodr. 4: 457. 1830. Type: MEXICO: Guerrero, ad Acapulco, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Chomelia protracta** (Bartl. ex DC.) Standl.

Guettarda ramuliflora Beurl., Kongl. Vetensk. Acad. Handl. 132. 1854. Type: PANAMA: Colón, near Porto Bello, *Billberg 642* (Holotype S, n.v.).

Guettarda sageretioides A. R. Molina, Ceiba 3: 96. 1952. Type: HONDURAS: El Paraíso, matorrales húmedos y rocosos del Río Lizapa, 1000 m, 19 Sep 1951, *A. Molina R. 4125* (Holotype US 2216040 (photo PTBG); Isotypes F (photo PTBG), GH, n.v.).

Guettarda sanblasensis Dwyer, Ann. Missouri Bot. Gard. 67: 204. 1980. Type: PANAMA: San Blas, headwaters of Río Cuadí, Camp Diablo (Drill site 22), 273 ft., 18 Dec 1967, *J. A. Duke, A. G. Robyns & S. E. Verhoek 3646* (Holotype MO 2183824 (photo PTBG)).

Guettarda scabra Lam. var. *seleriana* Loes., Fedde Rep. Sp. Nov. 18: 361. 1922. Type: MEXICO: Yucatán, Chiken Itza, im Walde, 2 Jun 1914, *C. Seler & E. Seler 5574* (Holotype B, presumably destroyed, fragment F; Isotypes GH, n.v., US (photos MEXU, PTBG)).—**Guettarda combsii** Urb.

Guettarda seleriana (Loes.) Standl., Contr. U.S. Natl. Herb. 23: 1384. 1926. *Guettarda scabra* Lam. var. *seleriana* Loes., Fedde Rep. Sp. Nov. 18: 361. 1922. Type: MEXICO: Yucatán, Chiken Itza, im Walde, 2 Jun 1914, *C. Seler & E. Seler 5574* (Holotype B, presumably destroyed, fragment F; Isotypes GH, n.v., US (photos MEXU, PTBG)). —**Guettarda combsii** Urb.

Guettarda tetrandra Sessé & Moç., Fl. Mexic., ed. 2, 218. 1894. Type: MEXICO: Without precise locality, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Guettarda tikalana Lundell, Wrightia 2: 63. 1960. Type: GUATEMALA: Petén, Tikal, on Uaxactun trail, in center of *escobal*, 18 Jul 1959, *C. L. Lundell 16519* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, US).

Guettarda tournefortiopsis Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 293. 1931. Based on *Tournefortiopsis reticulata* Rusby, Bull. New York Bot. Gard. 4: 369. 1907. Not *Guettarda reticulata* Griseb., 1863. Type: BOLIVIA: Without precise locality, *Bang 2230* (Holotype US, n.v.).

Guettarda turrialbana N. Zamora & Poveda, Ann. Missouri Bot. Gard. 75: 1157, *fig. 1*. 1988. Type: COSTA RICA: Cartago, Turrialba, CATIE, Bosque de Los Espabeles, 600 m, 26 Jun 1986, *N. Zamora, M. M. Chavarría & H. Gómez 1263* (Holotype CR, n.v.; Isotypes F (photo PTBG), K, n.v., MO (photo PTBG), NY, n.v.).

Habroneuron Standl., J. Wash. Acad. Sci. 17: 338. 1927. Type: Habroneuron mexicanum Standl.

Habroneuron mexicanum Standl., J. Wash. Acad. Sci. 17: 339. 1927. Type: MEXICO: Oaxaca, Tintalcingo, *F. Liebmann 11527* (Holotype C, n.v.; Isotype C, n.v., fragment US (photos MEXU, PTBG)).—**Habroneuron radicans** (Wernham) S. P. Darwin

Habroneuron radicans (Wernham) S. P. Darwin, Brittonia 32: 343. 1980. *Lindenia radicans* Wernham, J. Bot. 52: 226. 1914. Type: MEXICO: Oaxaca, shaded places on rocks at crossing of the river near Tocotepeque, Jul 1839, *T. Hartweg s.n.* (Holotype K, n.v. (photo MO)).

Hamelia Jacq., Enum. Syst. Pl. 2: 16. 1760. Type: Hamelia erecta Jacq. (Lectotype designated by Britton & Millsp., Bahama Fl. 441. 1920).

Hamelia axillaris Sw., Prodr. Veg. Ind. Occ. 46. 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (Lectotype S, n.v.; designated by Elias, 1976).

Hamelia barbata Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 115. 1940. Type: GUATEMALA: Escuintla, Finca Monterrey, S slope of Volcán de Fuego, 1140–1260 m, 5 Feb 1939, *P. C. Standley 64569* (Holotype F 982608 (photo PTBG); Isotypes A, n.v., NY, n.v., US (photos MEXU, PTBG)).

Hamelia calycosa Donn. Sm., Bot. Gaz. (Crawfordsville) 12: 132. 1887. Type: GUATEMALA: Alta Verapaz, Pansamalá, 3600 ft., Jun 1885, *H. von Tuerckheim 454* (Holotype US 943617 (photos MEXU, PTBG); Isotypes GH, n.v., K, n.v., NY, n.v., US (photos MEXU, PTBG)).

Hamelia chiapensis Brandegee, Univ. Calif. Publ. Bot. 6: 71. 1914. Type: MEXICO: Chiapas, Finca Mexiquito, Jul 1913, *C. A. Purpus 7030* (Holotype UC 173058, n.v.; Isotypes F (photos MEXU, PTBG), GH, n.v., MO (photos MEXU, PTBG), NY (n.v.), US (photos MEXU, PTBG)).—**Hamelia calycosa** Donn. Sm.

Hamelia costaricensis Standl., Contr. U.S. Natl. Herb. 20: 207. 1919. Type: COSTA RICA: Surulres [?] près San Mateo, Aug 1890, *P. Biolley 2656* (Holotype US 764417 (photos MEXU, PTBG)).—**Hamelia xerocarpa** Kuntze var. **costaricensis** (Standl.) Elias

Hamelia corymbosa Sessé & Moç., La Naturaleza, ser. 2, 1: 37. 1888 (as "*Hamellia*"). Type: MEXICO: Habitat in montibus Haereditatis-Ahuesuyo, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Hamelia patens** Jacq. var. **patens**

Hamelia declinata Sessé & Moç., Fl. Mexic., ed. 2, 60. 1894. Type: MEXICO: *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Hamelia axillaris** Sw.

Hamelia erecta Jacq., Enum. Syst. Pl. Carib. 16. 1760. Type: COLOMBIA: Bolívar, vicinity of Cartagena, *Jacquin s.n.* (location unknown).—**Hamelia patens** Jacq. var. **patens**

Hamelia hypomalaca B. L. Rob., Proc. Amer. Acad. Arts 45: 406. 1910. Type: MEXICO: Durango, without precise locality, Aug 1897, *J. N. Rose 2304* (Holotype US 301215 (photos MEXU, PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG)).—**Hamelia xorullensis** Kunth in Humb., Bonpl. & Kunth

Hamelia lanuginosa M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 233. 1844. Type: MEXICO: Veracruz, Mirador, Xalapa, 1841, *H. Galeotti 2615* (Holotype BR, n.v.; Isotypes MO (photos MEXU, PTBG), P (photos MEXU, PTBG)).—**Hamelia patens** Jacq. var. **patens**

Hamelia longipes Standl., Proc. Biol. Soc. Wash. 37: 53. 1924. Type: GUATAMALA: Izabal, vicinity of Escoba, on the bay opposite Puerto Barrios, 150 m or less, 2 Jun 1922, *P. C. Standley 24829* (Holotype US 1150447 (photos MEXU, PTBG); Isotype GH, n.v.).

Hamelia lutea Rohr ex Rees, Cyclop. 17. 1811. Type: Based on manuscript by von Rohr and Jaquin's (Collectanea, Ic. Rar. tab 335) description and illustration of *H. chrysantha*. —**Hamelia axillaris** Sw.

Hamelia macrantha Little, Carib. Forester 9: 274. 1948. Type: ECUADOR: Chimborazo, El Oro, *Spruce 6193* (Lectotype K, n.v. (photos F, MO); designated by Elias, 1976).

Hamelia magnifolia Wernham, J. Bot. 49: 210. 1911. Type: COSTA RICA: Puntarenas, bords du Río Corozal, près Santo Domingo de Golfo Dulce, Mar 1896, *H. Pittier 10091* (Lecotype BM, n.v.; Isolectotypes F, fragment n.v., GH, n.v., P (photos MEXU, PTBG), US (photos MEXU, PTBG); designated by Elias, 1976).

Hamelia magniloba Wernham, J. Bot. 49: 209. 1911. Type: NICARAGUA: Chontales, *Tate 200* (Holotype K, n.v.).—**Hamelia xerocarpa** Kuntze var. **xerocarpa**

Hamelia nodosa M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 234. 1844. Type: MEXICO: Veracruz, près Mirador, 3000 pieds, *H. Galeotti 2581* (Holotype presumably BR, n.v.; Isotype P, n.v.). —**Hamelia patens** Jacq. var. **glabra** Oerst.

Hamelia panamensis Standl., Contr. U.S. Natl. Herb. 20: 208. 1919. Type: PANAMA: Above Paca, 16 Apr 1908, *R. S. Williams 744* (Holotype US 678258 (photos MEXU, PTBG); Isotype NY, n.v.).—**Hamelia xerocarpa** Kuntze var. **costaricensis** (Standl.) Elias

Hamelia patens Jacq., Enum. Syst. Pl. Carib. 16. 1760. var. **patens**. Type: SANTO DOMINGO (DOMINICAN REPUBLIC): *Jacquin s.n.* (location unknown). *Dunhamelia*.

Hamelia patens Jacq. var. *coronata* Donn. Sm., Bot. Gaz. (Crawfordsville) 40: 4. 1905. Type: GUATEMALA: Alta Verapaz, Cubliquitz, 350 m, Aug 1903, *H. von Tuerckheim 8532* (Holotype US 943525 (photos MEXU, PTBG); Isotypes F, GH, n.v., NY, n.v., US (photos MEXU, PTBG)).—**Hamelia rovirosae** Wernh.

Hamelia patens Jacq. var. **glabra** Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 42. 1853. Type: NICARAGUA: San Juan, *Oersted s.n.* (Holotype C, n.v.).

Hamelia pauciflora Standl., Contr. U.S. Natl. Herb. 18: 139. 1916. Type: PANAMA: Panamá, forests on dry limestone around Alhajuela, Chagres Valley, 30–100 m, 12–15 May 1911, *H. Pittier 3469* (Holotype US 678513 (photos MEXU, PTBG)). Not *H. pauciflora* Willd., 1825.—**Hamelia sanguinea** Elias

Hamelia purpurascens S. F. Blake, Contr. Gray Herb. II, 52: 105. 1917. Type: BRITISH HONDURAS (BELIZE): On pine ridge near Manatee Lagoon, 6 Aug 1904, *M. E. Peck 104* (Holotype GH, n.v.).—**Hamelia rovirosae** Wernham

Hamelia rostrata Bartl. ex DC., Prodr. 4: 442. 1830. Type: MEXICO: Guerrero, Acapulco, *Haenke s.n.* (Holotype presumably PR (n.v.)). According to Elias (1976: 136), "This may be the oldest valid name for *H. versicolor*, but the description is too brief for accurate determination."—**Status uncertain**, probably **Hamelia versicolor** A. Gray

Hamelia rovirosae Wernham, J. Bot. 49: 211. 1911. Type: MEXICO: Tabasco, marshes on banks of Río Sebastián, 11 Jun 1889, *J. N. Rovirosa 499* (Holotype K, n.v.; Isotypes NY, n.v., US (photos MEXU, PTBG)).

Hamelia rowleei Standl., J. Wash. Acad. Sci. 15: 7. 1925. Type: COSTA RICA: Livingston on the Reventazón River, Jul–Aug 1920, *W. W. Rowlee & H. E. Stork 751* (Holotype US

1080249 (photos MEXU, PTBG)).—**Hamelia xerocarpa** Kuntze var. **xerocarpa**

Hamelia sanguinea Elias, Mem. New York Bot. Gard. 26: 116. 1976. Nom. nov. for *Hamelia pauciflora* Standl., 1916. Not *Hamelia pauciflora* Willd. in M. Martens & Galeotti, 1844. Type: PANAMA: Panamá, forests on dry limestone around Alhajuela, Chagres Valley, 30–100 m, 12–15 May 1911, *H. Pittier 3469* (Holotype US 678513 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Hamelia storkii Standl., J. Wash. Acad. Sci. 15: 7. 1925. Type: PANAMA: Western Panama, without precise locality, 1 Aug 1923, *H. E. Stork 38* (Holotype US 1166466 (photos MEXU, PTBG)).—**Hamelia xerocarpa** Kuntze var. **costaricensis** (Standl.) Elias

Hamelia suaveolens Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 414. 1818. Type: COLOMBIA: (Garapata), Río Magdalena, *A. Bonpland 1637* (Holotype P-Bonpland (photos MEXU, PTBG); Isotype P (photos MEXU, PTBG)).—**Hamelia patens** Jacq. var. **glabra** Oerst.

Hamelia versicolor A. Gray, Proc. Amer. Acad. Arts 21: 416. 1886. Type: MEXICO: Jalisco, barranca near Guadalajara, Jun 1886, *E. Palmer 125* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), P (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Hamelia viridifolia Wernham, J. Bot. 49: 213. 1911. Type: COSTA RICA: Broussailles à Nicoya, Mar 1900, *A. Tonduz 13867* (Holotype K, n.v.; Isotypes GH, n.v., P (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Hamelia patens** Jacq. var. **glabra** Oerst.

Hamelia xerocarpa Kuntze, Rev. Gen. Pl. 1: 284. 1891. var. **xerocarpa**. Type: COSTA RICA: Guanacaste?, Baguar, 600 m, *Tate 222* (Syntype B, presumably destroyed, K, n.v.). NICARAGUA: *Seemann 120* (Syntype B, presumably destroyed, BM, n.v.). Elias (1976: 118) wrongly cited *Kuntze 2028* (NY) as the "holotype," even though this specimen was not cited in Kuntze's protologue and has no type status. A syntype may be designated as lectotype.

Hamelia xerocarpa Kuntze var. **costaricensis** (Standl.) Elias, Mem. New York Bot. Gard. 26: 119. 1976. *Hamelia costaricensis* Standl., Contr. U.S. Natl. Herb. 20: 207. 1919. Type: COSTA RICA: Alajuela, Surulres [?] près San Mateo, Aug 1890, *P. Biolley 2656* (Holotype US 764417 (photos MEXU, PTBG)).

Hamelia xorullensis Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 414. 1818; folio ed. 323. 1818. Type: MEXICO: Michoacán, El Jorullo [=Xorullo], 1200 m, *A. Bonpland s.n.* (Holotype P-Bonpland., n.v.; Isotypes P, 2 sheets (photos MEXU, PTBG)).

Hedyotis L., Sp. Pl. 1: 101. 1753. Type: Hedyotis fruticosa L. Nom. et typ. cons. prop. (vide Jarvis in Taxon 41: 564. 1992). (As herein treated, *Hedyotis* includes *Carterella* Terrell, *Houstonia* L., *Oldenlandia* L., and *Oldenlandiopsis* Terrell & W. H. Lewis.)

Hedyotis acerosa A. Gray, Pl. Wright. 1: 81. 1852. var. **acerosa**. Type: U.S.A.: Texas, high prairies, from Live Oak Creek to the Las Moras, Jun 1849, *C. Wright 237* (Holotype, GH n.v.; Isotype US). *Ereicoctis, Houstonia, Mallostoma, Oldenlandia*.

Hedyotis acerosa A. Gray var. **polypremoides** (A. Gray) W. H. Lewis, Ann. Missouri Bot. Gard. 55: 31. 1968. *Houstonia polypremoides* A. Gray, Proc. Amer. Acad. Arts 21: 379. 1886. Type: MEXICO: Chihuahua, Santa Eulalia Mountains, 26 Sep 1885, *C. G. Pringle 356* (Lectotype GH, n.v.; Isolectotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG); designated by Lewis, 1968).

Hedyotis alexandrae (A. Carter) W. H. Lewis, Ann. Missouri Bot. Gard. 55: 31. 1968. *Bouvardia alexandrae* A. Carter, Madroño 13: 142, *figs. 1, 2*. 1955. Type: MEXICO: Baja California, Distr. del Sur, Arroyo del Salto, east of La Paz, 30 Mar 1949, *A. Carter 2577* (Holotype UC 985926, n.v.; Isotypes F, MEXU, US (photos MEXU, PTBG)). *Carterella*.

Hedyotis arenaria (Rose) W. H. Lewis, Rhodora 63: 211. 1961. *Houstonia arenaria* Rose, Contr. U.S. Natl. Herb. 1: 70. 1890. Type: MEXICO: Baja California, La Paz, 20 Jan–5 Feb 1890, *E. Palmer 28* (Lectotype US 47260 (photos MEXU, PTBG)).

Hedyotis asperuloides Benth., Bot. Voy. Sulphur 19, *pl. 13*. 1844. f. **asperuloides**. Type: MEXICO: Baja California, Cabo San Lucas, *Barclay s.n.* (Holotype BM, n.v.). *Houstonia*.

Hedyotis asperuloides Benth. f. **brandegeana** (Rose) W. H. Lewis, Rhodora 63: 221. 1961. *Houstonia brandegeana* Rose, Contr. U.S. Natl. Herb. 1: 70. 1890. Type: MEXICO: Baja California, La Paz, 20 Jan–5 Feb 1989, *E. Palmer 31* (Lectotype US 47259 (photos MEXU, PTBG); Isolectotypes F, GH, n.v.).

Hedyotis bouvardioides Seem., Bot. Voy. Herald 296. 1856. Type: MEXICO: Durango ?, Sierra Madre, *Seemann s.n.* (Holotype BM, n.v.; Isotypes C, n.v., fragment F (photo PTBG), GH, n.v.). *Houstonia*.—**Bouvardia bouvardioides** (Seem.) Standl.

Hedyotis brevipes (Rose) W. H. Lewis, Rhodora 63: 221. 1961. *Houstonia brevipes* Rose, Contr. U.S. Natl. Herb. 1: 83. 1890. Type: MEXICO: Baja California, Santa Rosalia, 24 Feb–3 Mar 1889, *E. Palmer 202* (Lectotype US 47258 (photos MEXU, PTBG); Isolectotype US (photos MEXU, PTBG)).

Hedyotis callitrichoides (Griseb.) W. H. Lewis, Rhodora 63: 222. 1961. *Oldenlandia callitrichoides* Griseb. Mem. Amer. Acad. Arts, n.s. 8: 506. 1863. Type: CUBA: Without precise locality, ad ripas rivulorum, *C. Wright 268* (Lectotype GOET, n.v.; designated by Lewis, 1961). Syntype: CUBA: *C. Wright 1640* (GOET, n.v.). *Oldenlandiopsis*.

Hedyotis cervantesii Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 390. 1820. Nom. superfl. Based on same type as *Hedyotis pygmaea* Roem. & Schult., Syst. Veg. 3: 526. 1818. Not *Houstonia pygmaea* C. H. Mueller & M. T. Muller, 1936. Type: MEXICO: Without precise locality, *A. Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotype B, presumably destroyed (photo MO)). *Anotis, Ereicoctis*.—**Hedyotis wrightii** (A. Gray) Fosberg

Hedyotis corymbosa (L.) Lam., Tabl. Encycl. 1: 272. 1792. *Oldenlandia corymbosa* L., Sp. Pl. 1: 119. 1753. Type: America Meridionali (Holotype LINN 155.9, n.v.).

Hedyotis deppeana (Schltdl. & Cham.) Steud., Nomencl. Bot., ed. 2, 1: 727. 1840. *Gerontogea deppeana* Schltdl. & Cham., Linnaea 5: 169. 1830. Type: MEXICO: Veracruz, San Andrés, 1829, *Schiede & Deppe 391* (Holotype presumably HAL, n.v.; Isotype MO (photos MEXU, PTBG)). *Oldenlandia*.—**Hedyotis microtheca** (Schltdl. & Cham.) Steud.

Hedyotis dichotoma Sessé & Moç., Fl. Mexic. 22. 1893. Not *Hedyotis dichotoma* Cav. 1801. Type: Habitat in montibus Sancti Angeli et Sancti Augustini. Floret Junio, *Sessé & Moçiño s.n.* (presumably MA, n.v.). —**Hedyotis exigula** W. H. Lewis

Hedyotis drymarioides (Standl.) W. H. Lewis, Rhodora 63: 221. 1961. *Houstonia drymarioides* Standl., J. Wash. Acad. Sci. 18: 162. 1928. Type: MEXICO: Tamaulipas, on mountains south of Victoria, 1000 m, 9 Apr 1926, *R. Runyon 870* (Holotype US 1315865 (photos MEXU, PTBG)).

Hedyotis exigula W. H. Lewis, Rhodora 63: 221. 1961. Nom. nov. for *Houstonia gracilis* Brandegee, Zoë 5: 238. 1907. Not *Hedyotis gracilis* DC., 1830. Type: MEXICO: Veracruz, Orizaba, May 1904, *C. A. Purpus 1251* (Holotype UC, n.v.; Isotypes F, MO (photos MEXU, PTBG)).

Hedyotis fruticosa Sessé & Moç., Fl. Mexic. 22. 1893. Not *Houstonia fruticosa* Willd. ex Roem. & Schult., 1818. Type: MEXICO: Habitat in Mexici circuitibus, *Sessé & Moçiño 553* (Presumably MA, n.v.; Isotype F (photo MO)).—**Bouvardia obovata** Kunth in Humb., Bonpl. & Kunth,

Hedyotis galeottii (M. Martens) Terrell & Lorence, Phytologia 66: 1. 1989. *Declieuxia galeottii* M. Martens in M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11:

231. 1844. Type: MEXICO: Oaxaca, Llano Verde, 3000–7000 ft., Apr 1840, *H. Galeotti 2603* (Holotype BR (photo PTBG); Isotypes BR, n.v., F, US (photo PTBG)).

Hedyotis gracilenta (I. M. Johnst.) W. H. Lewis, Rhodora 63: 222. 1961. *Houstonia gracilenta* I. M. Johnst., Proc. Calif. Acad. Sci. 4: 1174. 1824. Type: MEXICO: Baja California, San Diego Island, rocky island slope facing sea, 2 May 1921, *I. M. Johnston 3927* (Holotype UC, n.v.; Isotype US (photos MEXU, PTBG)).

Hedyotis gracilis Brandegee, Zoë 5: 238. 1907. Not *Hedyotis gracilis* DC., 1830. Type: MEXICO: Veracruz, Orizaba, May 1904, *C. A. Purpus 1251* (Holotype UC, n.v.; Isotypes F, MO (photos MEXU, PTBG)).—**Hedyotis exigula** W. H. Lewis

Hedyotis herbacea L., Sp. Pl. 102. 1753. Type: CEYLON: (Presumably LINN, n.v.). *Oldenlandia*.

Hedyotis humifusa A. Gray, Boston J. Nat. Hist. 6: 216. 1850. Type: U.S.A.: Texas, near Fredericksburg, 1847, *F. Lindheimer 621* (Holotype GH, n.v.; Isotypes BM, n.v., K, n.v., MICH, n.v., MO, PH, n.v., US, n.v.). *Houstonia, Oldenlandia*.

Hedyotis intricata Fosberg, Lloydia 4: 290. 1941. Based on *Houstonia fasciculata* A. Gray, Proc. Amer. Acad. Arts 17: 203. 1882. Not *Hedyotis fasciculata* Bertol., 1850. Syntypes: U.S.A.: Texas, Presidio, *Bigelow s.n.* (GH, n.v.); MEXICO: Coahuila, near Parras and Monclova, *Palmer 404* (GH, n.v.), *Palmer 406* (GH, n.v.).

Hedyotis kingii (Terrell) G. L. Nesom, Syst. Bot. 13: 434. 1988. *Houstonia kingii* Terrell, Brittonia 32: 491, *fig. 2*. 1980. Type: MEXICO: Oaxaca, E-facing slopes, mountains along route 175, 28 km by road south of Valle Nacional on way to Ixtlán de Juárez, ca. 2000 m, 30 Jul 1959, *R. M. King 2107* (Holotype MICH, 2 sheets, n.v.).

Hedyotis lancifolia Schumach. in Schumach. & Thonn., Beskr. Guin. Pl. 72. 1827. Type: GHANA: Valley of Aquapim, *Thonning 210* (Lecotype C, n.v.; Isolectotype S, n.v.; designated by Verdcourt, 1976: 292).

Hedyotis latifolia (M. Martens & Galeotti) Walp., Rep. Sp. Nov. 6: 55. 1846. *Oldenlandia latifolia* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 235. 1844. Not *Houstonia latifolia* Willd. ex Roem. & Schult., 1818. Type: MEXICO: Veracruz, Mirador, 3000 pieds, May 1840, *H. Galeotti 2556* (Holotype presumably BR, n.v.; Isotype F (photos MEXU, PTBG)).—**Hedyotis exigula** W. H. Lewis

Hedyotis leucophylla (Kunth) Spreng., Syst. 1: 411. 1826. *Rondeletia leucophylla* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 395, t. 290. 1820. Type: MEXICO: Inter Alto de Peregrino et flumen Papagallo, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotypes B (photo MO), P (photos MEXU, PTBG)).—**Rondeletia leucophylla** Kunth in Humb., Bonpl. & Kunth

Hedyotis longipes (S. Watson) W. H. Lewis, Rhodora 63: 222. 1961. *Houstonia longipes* S. Watson, Proc. Amer. Acad. Arts 18: 97. 1883. Syntypes: MEXICO: Without precise locality, States of Coahuila and Nuevo Léon, Feb–Oct 1880, *E. Palmer 394* (US 47845 (photos MEXU, PTBG)); Nuevo Léon, near Monterrey, 1–26 Feb 1880, *E. Palmer 395* (US, 2 sheets (photos MEXU, PTBG)).

Hedyotis lutea Sessé & Moç., Fl. Mexic. 22. 1893. Type: Habitat in montibus Temascaltepec, floret Julio, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Hedyotis mcvaughii Terrell, Novon 6: 128, *fig. 1*. 1996. Type: MEXICO: Jalisco, Mun. de Cabo Corrientes, steep mountain sides 3–10 km generally E on the road to Mina del Cuale from the junction 5 km NW of El Tuito, 850–1150 m, 16–19 Feb 1975, *R. McVaugh 26426* (Holotype MICH, n.v.).

Hedyotis mexicana Sessé & Moç., Pl. Nov. Hispan. ed. 1, 15. 1887. Type: MEXICO: Habitat in Mexici circuitibus, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Bouvardia ternifolia** (Cav.) Schltdl.

Hedyotis microtheca (Schltdl. & Cham.) Steud., Nomencl. Bot. ed. 2, 1: 728. 1840. *Gerontogea microtheca* Schltdl. & Cham.,

Linnaea 5: 169. 1830. Type: MEXICO: Veracruz, in sylvis Papantlae, *Schiede & Deppe 390* (Holotype presumably HAL, n.v.; Isotype MO (photos MEXU, PTBG)). *Oldenlandia*.

Hedyotis mucronata Benth., Bot. Voy. Sulphur 19. 1844. Type: MEXICO: Baja California, Magdalena Bay, *Barclay s.n.* (Holotype BM, n.v.). *Houstonia*.

Hedyotis mullerae Fosberg, Lloydia 4: 288, *fig. 3*. 1941. Type: MEXICO: Coahuila, Mun. de Cuatro Ciénegas, Cañón del Agua, Sierra de la Madera, 9 Sep 1939, *C. H. Muller & K. Muller 3234* (Holotype US 2133305 (photos MEXU, PTBG); Isotype GH, n.v.). *Houstonia*.

Hedyotis mutica Wedd., Chlor. And. 2: 43. 1857. Type: COLOMBIA: Cundimarca, Prov. Bogota, *Goudot s.n.* (Lectotype P, n.v.; Isolectotype F, n.v.; designated by Mena V., 1986).—**Arcytophyllum muticum** (Wedd.) Standl.

Hedyotis nigricans (Lam.) Fosberg, Lloydia 4: 287. 1941. *Gentiana nigricans* Lam., Encycl. 2: 645. 1788. Type: MEXICO: Locality and collector unknown (Holotype P-JU, n.v.). *Houstonia*.

Hedyotis nigricans (Lam.) Fosberg var. *scabra* (S. Watson) Fosberg, Lloydia 4: 288. 1941. *Houstonia angustifolia* Michx. var. *scabra* S. Watson, Proc. Amer. Acad. Arts 18: 97. 1883. Type: MEXICO: Coahuila, Saltillo, Caracol Mountains, 1–15 Apr 1880, *E. Palmer 410* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).—**Hedyotis nigricans** (Lam.) Fosberg

Hedyotis palmeri (A. Gray) W. H. Lewis, Rhodora 63: 222. 1961. *Houstonia palmeri* A. Gray, Proc. Amer. Acad. Arts 17: 202. 1882. Type: MEXICO: Coahuila, in the mountains east and south of Saltillo, Feb–Oct 1880, *E. Palmer 397* (Syntype US 47431 (photos MEXU, PTBG)); *E. Palmer 398* (Syntype US 70740 (photos MEXU, PTBG)).

Hedyotis peninsularis (Brandegee) W. H. Lewis, Rhodora 63: 222. 1961. *Houstonia peninsularis* Brandegee, Zoë 5: 160. 1903. Type: MEXICO: Baja California, Cape Retion, Sierra de la Trinidad, Nov 1902, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)).

Hedyotis pentandra Schumach. & Thonn., Kongel. Danske Vidensk. Selsk. Naturvidensk., Math. Afh. 3: 71. 1827. Type: GUINEA: Aquapim, "S" [Haaslund Smith?] (location unknown).—**Pentodon pentandrus** (Schumach. & Thon.) Vatke

Hedyotis polypremoides (A. Gray) Shinners, Field & Lab. 17: 168. 1949. *Houstonia polypremoides* A. Gray, Proc. Amer. Acad. Arts 21: 379. 1886. Type: MEXICO: Chihuahua, Santa Eulalia Mountains, 26 Sep 1885, *C. G. Pringle 356* (Lectotype GH, n.v.; Isolectotypes MO (photos MEXU, PTBG), US (photos MEXU, US)).

Hedyotis polypremoides A. Gray var. *bigelovii* Greenman, Proc. Amer. Acad. Arts 32: 291. 1897. Type: U.S.A.: Florence Mountains, Jun 1852, *Bigelow 437* (Holotype GH, n.v.).—**Hedyotis polypremoides** (A. Gray) Shinners

Hedyotis pringlei (B. L. Rob.) W. H. Lewis, Rhodora 63: 222. 1961. *Oldenlandia pringlei* B. L. Rob., Proc. Amer. Acad. Arts 27: 169. 1892. Type: MEXICO: San Luis Potosí, alkaline plains, Hacienda de Angostura, 27 Jun 1891, *C. G. Pringle 3758* (Holotype GH, n.v.; Isotypes F, MO (photo PTBG), US, 2 sheets (photos MEXU, PTBG)).

Hedyotis pygmaea Roem. & Schult., Syst. Veg. 3: 526. 1818. Type: MEXICO: Without precise locality, *A. Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotype B, presumably destroyed (photo MO)).—**Hedyotis wrightii** (A. Gray) Fosberg

Hedyotis rubra (Cav.) A. Gray, Mem. Amer. Acad. Arts, n.s. 4: 61. 1849. *Houstonia rubra* Cav., Icon. 5: 48, *t. 474, fig. 1*. 1799. Type: MEXICO: Hidalgo, Ixmiquilpan, *Née s.n.* (presumably MA, n.v.). *Oldenlandia*.

Hedyotis serpyllacea Schltdl., Linnaea 9: 599. 1834. Type: MEXICO: México, inter La Joya et San Salvador, Jun 1829, *Schiede & Deppe 265* (Holotype presumably HAL, n.v.; Isotypes B (photo MO), F (photo PTBG), MO). *Houstonia*.

Hedyotis sharpii (Terrell) G. L. Nesom, Syst. Bot. 13: 434. 1988. *Houstonia sharpii* Terrell, Brittonia 32: 490, *fig. 1*. 1980. Type: MEXICO: Hidalgo, camino entre Metepec y Tenango de Doria, entre 16 y 31.5 km al NNE de Tulancingo, 18 km NNE de Metepec, 29 Mar 1974, *S. D. Koch 7423* (Holotype US 2754863 (photos MEXU, PTBG); Isotypes CHAPA, ENCB, MEXU).

Hedyotis sinaloeae W. H. Lewis, Rhodora 63: 222. 1961, nom. nov. for *Houstonia parvula* Brandegee, Zoë 5: 221. 1905. Not *Hedyotis parvula* (A. Gray) Fosb., 1943. Type: MEXICO: Sinaloa, vicinity of Culiacán, 12 Oct 1904, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)).

Hedyotis spellenbergii G. L. Nesom & Vorobik, Syst. Bot. 13: 432. 1988. Type: MEXICO: Chihuahua, Mun. Ocampo, area of Cascada de Basaseachic at the confluence of Río Basaseachic and Río Durazno, ca. 2 mi S of village of Basaseachic, 2100–2200 m, 18 May 1985, *J. Grimes, T. Ayers, M. Lavan & R. Scott 2855* (Holotype TEX, n.v.; Isotypes ARIZ, n.v., CAS, n.v., MEXU, n.v., NMC, n.v., NY, n.v., US, n.v.).

Hedyotis spinescens Sessé & Moç., Fl. Mexic. 22. 1893. Type: MEXICO: Habitat in aridis Tehuacani circuitibus. Floret Maio, *Sessé & Moçiño s.n.* (presumably MA, n.v.).
—**Bouvardia erecta** (DC.) Standl.

Hedyotis teretifolia (Terrell) G. L. Nesom, Syst. Bot. 13: 434. 1988. *Houstonia teretifolia* Terrell, Brittonia 31: 166. 1979. Type: MEXICO: Coahuila, 12 km NNE of Las Margaritas on easternmost ridge of Sierra de las Margaritas, 1300–1400 m, 24 Sep 1972, *M. C. Johnston, F. Chiang & T. Wendt 9508E* (Holotype TEX, n.v.).

Hedyotis terrellii Lorence, Novon 7: 51, *fig. 3*. 1997. Type: MEXICO: Oaxaca, Distr. de Mixe, Mun. de Totontepec, 3 km al SW de Totontepec, carretera a Mitla, 1910 m, 6 Sep 1986, *R. Torres C. & C. Martínez 9067* (Holotype PTBG 12314; Isotype MEXU).

Hedyotis umbratilis (B. L. Rob.) W. H. Lewis, Rhodora 63: 222. 1961. *Houstonia umbratilis* B. L. Rob., Proc. Amer. Acad. Arts 45: 401. 1910. Type: MEXICO: Nuevo Léon, shaded cliffs and mountains, near Monterrey, 25 Apr 1906, *C. G. Pringle 13877* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Hedyotis vergrandis W. H. Lewis, Rhodora 63: 222. 1961. Nom. nov. for *Houstonia prostrata* Brandegee, Zoë 5: 105. 1901. Not *Hedyotis prostrata* Blume, 1823, nor Korth., 1851. Type: MEXICO: Baja California, La Palma, Cape Region, 25 sep 1899, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US, 2 sheets (photos MEXU, PTBG)).

Hedyotis watsonii W. H. Lewis, Rhodora 63: 222. 1961. Nom. nov. for *Oldenlandia ovata* S. Watson, Proc. Amer. Acad. 18: 97. 1883. Not *Hedyotis ovata* Thunb. ex Maxim., 1833, nor Thwaites ex Hook. f., 1892. Type: MEXICO: Nuevo Léon, Guajuco, Feb–Oct 1880, *E. Palmer 399* (Lecotype GH, n.v.; Isolectotype US 47919 (photos MEXU, PTBG)).

Hedyotis wrightii (A. Gray) Fosberg, Lloydia 4: 290. 1941. *Houstonia wrightii* A. Gray, Proc. Amer. Acad. Arts 17: 202. 1882. Type: MEXICO: Nuevo León, shaded cliffs of mountains, near Monterrey, 25 Apr 1906, *C. G. Pringle 13877* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Hedyotis xestosperma (B. L. Rob. & Greenman) W. H. Lewis, Rhodora 63: 222. 1961. *Oldenlandia xestosperma* B. L. Rob. & Greenman, Proc. Amer. Acad. Arts 32: 41. 1896. Type: MEXICO: Oaxaca, open glades, Sierra de San Felipe, 8000 ft., Jun 1894, *C. G. Pringle 4692* (Lectotype GH, n.v.; Isolectotypes BM, n.v., F, K, n.v., MO (photos MEXU, PTBG), MSC, n.v., PH, n.v., US, 2 sheets (photos MEXU, PTBG), VT n.v.); designated by Terrell, 1980). *Houstonia*.
—**Bouvardia xestosperma** (B. L. Rob. & Greenman) Terrell & S. D. Koch

Hemidiodia K. Schum. in Mart., Fl. Bras. 6(6): 29. 1888. Type: Hemidioidia ocymifolia

(Willd.) K. Schum. [Herein treated as a synonym of *Diodia* L.]
Hemidiodia ocymifolia (Willd. ex Roem. & Schult.) K. Schum. in Mart., F. Bras. 6(6): 29. 1888 (as *ocimifolia*). *Spermacoce ocymifolia* Willd. ex Roem. & Schult., Syst. Veg. 3: 530. 1819. Type: WEST INDIES: Without precise locality, 1768, *Rudolphi s.n.* (presumably B-W, n.v.). *Diodia*.—**Spermacoce ocymifolia** Willd. ex Roem. & Schult.

Hexasepalum Bartl. ex DC., Prodr. 4: 561. 1830. Type: Hexasepalum angustifolium Bartl. ex DC.
Hexasepalum angustifolium Bartl. ex DC., Prodr. 4: 561. 1830. Type: MEXICO: Hidalgo, Real del Monte, *Haenke s.n.* (Holotype PR, n.v., fragment G-DC, n.v. (microfiche 4: 561.1); Isotype MO (photos MEXU, PTBG)).—**Diodia crassifolia** Benth. (vel sp. aff.)

Higginsia Pers., Syn. Pl. 1: 133. 1805. Type: Higginsia obovata Pers., "Higgensia" orth. mut. Steud. Nom., ed. 2, 1: 767. 1840. [Herein treated as a synonym of *Hoffmannia* Sw.]
Higginsia discolor (Lem.) Planch., Fl. Serres. 5: 482d. 1849. *Campylobotrys discolor* Lem., Fl. Serres 3: Misc. 37, *fig.* 1837. Type: Not designated, based on cultivated material collected by Galeotti in Mexico.
—**Hoffmannia discolor** (Lem.) Hemsl.
Higginsia ghiesbreghtii (Lem.) Hook., Bot. Mag. *tab. 5383*. 1863. *Campylobotrys ghiesbreghtii* Lem., Illust. Hort. 8: *pl. 279*. 1861 [as *Gheisbechtii*]. Type: Not designated, based on cultivated material from seed collected by Ghiesbreght in Chiapas, Mexico.
—**Hoffmannia ghiesbreghtii** (Lem.) Hemsl.
Higginsia macrophylla Planch., Fl. Serres 5: 482d. 1849. Type: Not designated, described from cultivated material grown from seeds collected in Guatemala.—**Status uncertain**, probably **Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams
Higginsia mexicana Klotzsch in Link, Klotzsch & Otto, Ic. Pl. Rar. Hort. Berol. 1: 57, *tab. 23*. 1841. Type: Not designated, based on material of Mexican origin cultivated at the Berlin Botanical Garden.—**Hoffmannia excelsa** (Kunth) K. Schum.
Higginsia psychotriifolia Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 50. 1853 [as *psychotriaefolia*]. Type: COSTA RICA: In Monte Barba, 6000 ft., May 1847, *Oersted 11507*. (Holotype C, n.v. (photos F, MO) Isotype US (photos MEXU, PTBG)).
—**Hoffmannia psychotriifolia** (Benth. in Oerst.) Griseb.
Higginsia refulgens Hook. f., Bot. Mag. *tab. 5346*. 1862. Type: Based on material cultivated at Kew thought to be from South America, but most probably from Chiapas, Mexico, or Central America (Holotype presumably K, n.v.).—**Hoffmannia refulgens** (Hook. f.) Hemsl.
Higginsia refulgens Hook. f. var. Σ *argyroneura* (Linden) Regel, Gartenfl. 17: 116. 1868. *Campylobotrys argyroneura* Linden, Belg. Hortic. 8: 166. 1858. Type: Not designated, based on cultivated material collected by Ghiesbreght in Chiapas, Mexico.
—**Hoffmannia refulgens** (Hook. f.) Hemsl.
Higginsis refulgens Hook. f. var. δ *ortgiesii* Regel, Gartenfl. 17: 116. 1868. Type: Not designated, based on cultivated material of Mexican origin.—**Hoffmannia regalis** (Hook. f.) Hemsl.
Higginsia refulgens Hook. f. var. β *pyrophylla* Regel, Gartenfl. 17: 116. 1868. Type: Not designated, based on cultivated material from Volcán San Martín, Veracruz, Mexico.
—**Hoffmannia refulgens** (Hook. f.) Hemsl.
Higginsia refulgens Hook. f. var. Σ *roezlii* Regel, Gartenfl. 17: 116. 1868. Type: Not designated, based on cultivated material of Mexican origin.—**Hoffmannia regalis** (Hook. f.) Hemsl.
Higginsia refulgens Hook. f. var. ∫ *smaragdina* Regel, Gartenfl. 17: 116. 1868. Type: Not designated, based on cultivated material of Mexican origin.—**Hoffmannia regalis** (Hook. f.) Hemsl.
Higginsia regalis Hook. f., Bot. Mag. *tab. 5280*. 1861. Type: Based on material cultivated at

Kew of unknown origin (Holotype presumably K, n.v.).—**Hoffmannia regalis** (Hook. f.) Hemsl.

Hillia Jacq., Enum. Pl. Carib. 3. 1760. Type: Hillia parasitica Jacq.

Hillia allenii C. M. Taylor, Selbyana 11: 32. 1989. Based on *Ravnia panamensis* Steyerm., Ceiba 3: 22. 1952. Not *Hillia panamensis* Standl., 1921. Type: PANAMA: Coclé, North Hills, El Valle de Antón, 29 Jun 1946, *P. H. Allen 3558* [collector's name and number erroneously omitted in the protologue] (Holotype F 1394242 (Photo PTBG); Isotype MO, n.v.).

Hillia chiapensis Standl., J. Wash. Acad. Sci. 16: 16. 1926. Type: MEXICO: Chiapas, damp forest in mountains near Fénix, Apr 1925, *C. A. Purpus 262* (Holotype US 1208244 (photos F, MEXU, PTBG)).—**Hillia panamensis** Standl.

Hillia chiapensis Standl. var. *grandifolia* Dwyer, Ann. Missouri Bot. Gard. 67: 216. 1980. Type: PANAMA: Veraguas, lower montane wet forest 6–7 km W of Santa Fé on new road past agricultural school, 2900 ft., *M. Nee 9698* (Holotype MO 2413929).—**Hillia palmana** Standl.

Hillia chiriquiensis Dwyer, Ann. Missouri Bot. Gard. 67. 216. 1980. Type: PANAMA: Chiriquí, N of San Felix at Chriquí–Bocas del Toro border, on Cerro Colorado copper mine road along continental divide, 5000–5500 ft., 3 May 1975, *S. Mori & J. Kallunki 5810* (Holotype MO 2259027 (photo PTBG); Isotype MO 2259026 (photo PTBG)).—**Cosmibuena valerii** (Standl.) C. M. Taylor

Hillia grayumii C. M. Taylor, Selbyana 12: 137, *fig. 3*. 1991. Type: COSTA RICA: Heredia, Finca La Selva, the OTS field station near Puerto Viejo de Sarapiquí, near the junction of the Ríos Puerto Viejo and Sarapiquí, 100 m, 5 May 1980, *M. H. Grayum 2793* (Holotype DUKE, n.v.; Isotype DUKE, n.v.).

Hillia hathewayi Fosberg, Sida 2: 387. 1966. Type: COSTA RICA: Heredia, south slope of Volcán Barba, 1950 m, 26 May 1965, *W. H. Hatheway 1371* (Holotype US (photos MEXU, PTBG); Isotypes F, GH, n.v.).—**Hillia panamensis** Standl.

Hillia ligulifolia Dwyer, Ann. Missouri Bot. Gard. 67: 218. 1980. Type: PANAMA: Veraguas, lower montane wet forest 6–7 km W of Santa Fé on new road past agriculture school, 2900 ft., 17 Feb 1974, *M. Nee 9812* (Holotype MO 2244248 (photo PTBG); Isotype MO 2244247 (photo PTBG)).—**Cosmibuena valerii** (Standl.) C. M. Taylor

Hillia longifilamentosa (Steyerm.) C. M. Taylor, Selbyana 11: 32. 1989. *Ravnia longifilamentosa* Steyerm., Ceiba 3(1): 21. 1952. Type: PANAMA: Chiriquí, upper southern slopes of Quebrada Velo, vicinity of Finca Lérida, 5000 ft., 25 Jul 1947, *P. H. Allen 4744* (Holotype F 1394241 (photo PTBG); Isotype MO, n.v.).

Hillia loranthoides Standl., J. Wash. Acad. Sci. 18: 165. 1928. Type: COSTA RICA: Guanacaste, Quebrada Serena, southeast of Tilarán, 700 m, 27 Jan 1926, *P. C. Standley & J. Valerio 46152* (Holotype US 1254482 (photos MEXU, PTBG)).

Hillia macrocarpa Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 23. 1943. Type: GUATEMALA: Quezaltenango, lower south-facing slopes of Volcán de Santa María, between Santa María de Jesús and Calahuaché, along the great barranca between Finca Pirineos and Patzulín, 1300–1500 m, Jan 1940, *J. A. Steyermark 33667* (Holotype F, n.v.).

Hillia macrophylla Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 201. 1931. Type: ECUADOR: Chimborazo, *Spruce 6186* (Holotype K, n.v.).

Hillia matudae Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 51. 1940. Type: MEXICO: Chiapas, Mt. Tacaná, 2000–4040 m, Aug 1938, *E. Matuda 2327* (Holotype F; Isotypes GH, n.v., MICH, n.v.).—**Cosmibuena matudae** (Standl.) L. O. Williams

Hillia maxonii Standl., J. Wash. Acad. Sci. 18: 163. 1928. Type: NICARAGUA: Las Nubes and vicinity, south of Managua, 800–900 m, 28 Jan 1923, *W. R. Maxon, A. D. Harvey &*

A. T. Valentine 7501 (Holotype US 1181212 (photos MEXU, PTBG)).

Hillia oaxacana C. M. Taylor, Ann. Missouri Bot. Gard. 78: 523, *fig. 2*. 1991. Type: MEXICO: Oaxaca, Distr. de Putla, Arroyo de San Isidro, 3 km al este de Concepción, Buenavista, 10 Jun 1985, *A. García M. & R. Torres C. 1523* (Holotype MO; Isotype MEXU).

Hillia palmana Standl., J. Wash. Acad. Sci. 18: 164. 1928. Type: COSTA RICA: Heredia, vicinity of La Palma, on the road to La Hondura, 1500–1700 m, 17–18 Jul 1923, *W. R. Maxon & A. D. Harvey 8045* (Holotype US 1181721 (photos MEXU, PTBG)).

Hillia panamensis Standl., N. Amer. Fl. 32: 117. 1921. Type: PANAMA: Chiriquí, humid forest around Los Siguas Camp, southern slope of Cerro de la Horqueta, 1700 m, 17–19 Mar 1911, *H. Pittier 3190* (Holotype US 677584 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Hillia tetrandra Sw., Prodr. Veg. Ind. Occ. 58. 1788. Type: JAMAICA: *Swartz s.n.* (presumably S, n.v.).

Hillia tetrandra Sessé & Moç., Fl. Mexic., ed. 2, 90. 1894. Type: MEXICO: Habitat parasitica supra proceriorum arborum axillas in Tuxtlensibus sylvis, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Hillia tetrandra** Sw.

Hillia triflora (Oerst.) C. M. Taylor, Selbyana 11: 30. 1989. var. **triflora**. *Ravnia triflora* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 50. 1853. Type: COSTA RICA: Cartago, near Cartago and Candelaria, 1800–2400 m, *Oersted 11696* (Lectotype C, n.v. (photos F, MO, NY); designated by Standley, 1938).

Hillia triflora (Oerst.) C. M. Taylor var. **pittieri** (Standl.) C. M. Taylor, Selbyana 11: 31. 1989. *Ravnia pittieri* Standl., N. Amer. Fl. 32: 114. 1921. Type: COSTA RICA: Alajuela, Santa Clara, *H. Pittier 13461* (Holotype NY, n.v. (photo F)).

Hillia valerii Standl., J. Wash. Acad. Sci. 18: 164. 1928. Type: COSTA RICA: San José, Vicinity of La Palma, on the road to La Hondura, 1500–1700 m, 17–18 Jul 1923, *W. R. Maxon & A. D. Harvey 8092* (Holotype US 1181776 (photos MEXU, PTBG)).—**Cosmibuena valerii** (Standl.) C. M. Taylor

Hintonia Bullock, Hook. Icon. Pl. 33, *tab. 3295*: 1. 1935. Type: Hintonia latiflora (Sessé & Moç. ex DC.) Bullock

Hintonia latiflora (Sessé & Moç. ex DC.) Bullock, Hook. Icon. Pl. 33, *tab. 3295*: 4. 1935. *Coutarea latiflora* Sessé & Moç. ex DC., Prodr. 4: 350. 1830. Type: Not designated, based on an unpublished illustration, Fl. Mexic. Ic. (calque presumably MA, n.v., G-DC, n.v.).

Hintonia latiflora (Sessé & Moç. ex DC.) Bullock var. *leiantha* Bullock, Hook. Icon. Pl. 33, *tab. 3295*: 1. 1935. Type: MEXICO: México, Temascaltepec, Ixtapan, 1000 m, Aug 1932, *G. B. Hinton 1258* (Holotype K, n.v.).—**Hintonia latiflora** (Sessé & Moç. ex DC.) Bullock

Hintonia lumaeana (Baill.) Bullock, Hook. Icon. Pl. 33, *tab. 3295*: 5. 1935. *Coutarea lumaeana* Baill., Adansonia 12: 301. 1879. Type: GUATEMALA: Côté occidentale des Andes, 450–500 metres, 14° lat. N, 1878, *G. Luma s.n.* (Holotype P (photos MEXU, PTBG)). *Portlandia*.

Hintonia octomera (Hemsl.) Bullock, Hook. Icon. Pl. 3, *tab. 3295*: 6. 1935. *Coutarea octomera* Hemsl., Biol. Centr.-Amer., Bot. 4: 101. 1887. Type: MEXICO: Yucatán, Cozumel Island, Apr 1895, *G. F. Gaumer 148* (Holotype K, n.v.).

Hintonia pulchra D. R. Simpson, Phytologia 29: 277. 1974. Type: COSTA RICA: Osa Peninsula, about 5 km W of Rincón de Osa, 50–200 m, 9–12 Jan 1970, *W. C. Burger & R. L. Liesner 7320* (Holotype F 1729029; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Osa pulchra** (D. R. Simpson) Aiello

Hintonia standleyana Bullock, Hook. Icon. Pl. 3, *tab. 3295*: 6. 1935. Syntypes: MEXICO: Chihuahua, *E. Palmer 16* (K, n.v.); Guerrero, El Limón, 3 Apr 1903, *E. W. Nelson 6985* (US 399334 (photos MEXU, PTBG)),

Langlassé 234 (K, n.v.); Nayarít, Tepic, *Lumholtz s.n.* (US); Puebla, *Andrieux 337* (K, n.v.), *Pringle 8583* (K, n.v.), *Seler 849* (US), *Rose & Hay 5932* (US), *Rose, Painter & Rose 10123* (US); Oaxaca, *Purpus 3279* (US), *Reko 4253* (US), *Pringle 7473* (US), *Pringle & Conzatti 27* (US). C. V. Morton annotated the *Nelson 6985* specimen at US as lectotype, but this choice was not published.—**Hintonia latiflora** (Sessé & Moç. ex DC.) Bullock

Hippotis Ruiz & Pavón, Fl. Peruv. Chil. 33 1794. Type: Hippotis trifolia Ruiz & Pavón

Hippotis albiflora H. Karst., Fl. Columb. 1: 33. 1860. Type: COLOMBIA: Mountains E of Bogotá, *Karsten s.n.* (presumably W, n.v.)

Hoffmannia Sw., Prodr. 30. 1788. Type: Hoffmannia pedunculata Sw.

Hoffmannia aeruginosa Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1313. 1938. Type: COSTA RICA: Zarcero, 1500 m, 10 Aug 1937, *Austin Smith A86* (Holotype F 941349 (photo PTBG)).

Hoffmannia affinis Hemsl., Diag. Pl. Nov. Mexic. 31. 1879. Type: COSTA RICA: Without precise locality, *Endres 150* (Holotype K, n.v.; Isotype W (photo PTBG)). —**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Hoffmannia amplexifolia Standl., J. Wash. Acad. Sci. 15: 8. 1925. Type: COSTA RICA: Cartago, vicinity of Orosí, moist forest, 30 Mar 1924, *P. C. Standley 39869* (Holotype US 1153192 (photos MEXU, PTBG)).

Hoffmannia angustifolia Standl., Contr. U.S. Natl. Herb. 20: 206. 1919. Type: GUATEMALA: Zacatepéquez, Acatepéque, 1290 m, Mar 1892, *J. D. Smith 2747* (Holotype US 888492 (photos MEXU, PTBG); Isotype GH, n.v.).—**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Hoffmannia araneopedaria Dwyer, Ann. Missouri Bot. Gard. 67: 226. 1980. Type: PANAMA: Darién, Cerro Mali on Colombian border, S slope just below summit, 1400 m, 6 Feb 1975, *A. Gentry & S. Mori 14166* (Holotype MO 2470655; Isotype MO 2470654).

Hoffmannia arborescens Donn. Sm., Bot. Gaz. (Crawfordsville) 37: 417. 1904. Type: COSTA RICA: Forêts de Santa Rosa del Copey, 1800 m, Apr 1898, *A. Tonduz 8121* [Herb. Inst. Fysico-geogr. nat. costaricensis 12230] (Holotype US 943523 (photos MEXU, PTBG)).

Hoffmannia areolata Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 52. 1940. Type: PANAMA: Chiriquí, Boquete District, near Bajo Chorro, Jan 1938, *M. E. Davidson 40* (Holotype F 915621 (photo PTBG); Isotypes GH, n.v., MO).

Hoffmannia asclepiadea Standl., J. Wash. Acad. Sci. 15: 7. 1925. Type: COSTA RICA: San José, Las Nubes, 1500–1900 m, 20–25 Mar 1924, *P. C. Standley 38349* (Holotype US 1153122 (photos MEXU, PTBG)).

Hoffmannia bullata L. O. Williams, Fieldiana, Bot. 36: 52. 1973. Type: GUATEMALA: Izabal, between Virginia and Lago Izabal, Montaña del Mico, 50–100 m, 4 Apr 1940, *J. A. Steyermark 38719* (Holotype F). —**Hoffmannia discolor** (Lem.) Hemsl.

Hoffmannia calycosa Donn. Sm., Bot. Gaz. (Crawfordsville) 40: 4. 1905. Type: GUATEMALA: Alta Verapaz, Cubliquitz, 350 m., May 1901 *H. von Tuerckheim 7912* (Holotype US 576489 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), US, 2 sheets (photos MEXU, PTBG)).

Hoffmannia capillacea Dwyer, Ann. Missouri Bot. Gard. 56: 274. 1969. Type: PANAMA: Coclé, mountains N of El Valle, 2500–3000 ft., 28 May 1967, *Lewis, MacBryde, Oliver & Ridgway 1783* (Holotype MO; Isotypes MO 2214603, 2163471). Note: Between the time *Hoffmannia capillacea* Dwyer was published and the Rubiaceae treatment for the *Flora of Panama* was published (Dwyer, 1980), the wrong labels (*T. Elias 1783*) were inadvertently mounted on the type collection. Dwyer's protologue lists the type as being *Lewis et al. 1783*. The three collections in the type folder at MO correspond with the description of *H. capillacea* but bear *Elias*

1783 labels. A reëxamination of the Lewis and Elias field books by C. M. Taylor and me in June 1996 revealed that *Elias 1783* was collected in San Blas, Panama, reputedly as a species of Annonaceae: "headquarters of Río Mulatupo, tree 5 m, fruits green ripening yellow." The *Lewis et al. 1783* collection was said to be "Rubiaceae, shrub to 2.2 m, calyx tube red, flowers white, fruit red." Therefore, the *Lewis et al. 1783* label seems to be the correct one.

Hoffmannia carlsoniae Standl. & L. O. Williams ex A. R. Molina, Ceiba 14: 3. 1968. Type: MEXICO: Chiapas, Los Lagos, 3 mi. NW of Rancho San José, which is 34 mi. SE of Comitán, 5,000 ft., 15–20 Apr 1949, *M. C. Carlson 1874* (Holotype presumably EAP, n.v.; Isotype F 1412975).—**Hoffmannia huehueteca** Standl. & Steyerm.

Hoffmannia carpinterae Standl., N. Amer. Fl. 32: 199. 1934. Based on *Hoffmannia macrophylla* Standl. 1925, not *H. macrophylla* Hemsl., 1881. Type: COSTA RICA: Cartago, Cerro de la Carpintera, 1700 m, *P. C. Standley 35636* (Holotype US 1152958 (photos MEXU, PTBG); Isotype US 1152957 (photos MEXU, PTBG)).—**Hoffmannia leucocarpa** Standl.

Hoffmannia cauliflora Hemsl., Diag. Pl. Mexic. 30. 1879. Type: GUATEMALA: Without precise locality, *Skinner s.n.* (Holotype K, n.v.).

Hoffmannia cercidifolia Dwyer, Ann. Missouri Bot. Gard. 56: 275. 1969. Type: PANAMA: Darién, Cerro Campamento, S of Cerro Pirre, 20–22 Mar 1968, *J. A. Duke 15597* (Holotype MO 1956874 (photo PTBG)).

Hoffmannia chiapensis Standl., Contr. U.S. Natl. Herb. 20: 206. 1919. Type: MEXICO: Chiapas, Cerro del Boquerón, Jun 1914, *C. A. Purpus 7268*, in part (Holotype US 567526 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).—**Hoffmannia psychotriifolia** (Benth in Oerst.) Griseb.

Hoffmannia confertiflora Standl., Contr. U.S. Natl. Herb. 20: 206. 1919. Type: GUATEMALA: Quiché, San Miguel Uspantán, 2100 m, 1892, *Heyde & Lux 3169* (Holotype US 888491 (photos MEXU, PTBG); Isotype GH, n.v.).

Hoffmannia congesta (Oerst.) Dwyer in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 171. 1993. *Xerococcus congestus* Oerst., Vidensk. Meddel. Dansk. Naturhist. Foren Kjöbenhavn 1852: 52. 1853. Type: COSTA RICA: Turrialba, 3000 ft., *Oersted 11776* (Holotype C, n.v. (photos F, MO); Isotype F, n.v.).

Hoffmannia conzattii B. L. Rob., Proc. Amer. Acad. Arts 45: 406. 1910. Based on *Coffea obovata* Schlecht. & Cham., Linnaea 6: 412. 1831. Not *Hoffmannia obovata* (Ruiz & Pavón) Standl., 1930 (based on *Ohigginsia obovata* Ruiz & Pavón 1798). Type: MEXICO: Veracruz, Cantón de Córdoba, Colonia Melchor Ocampo, 1200 m, 19 Jun 1896, *C. Conzatti 168* (Holotype GH, n.v.).

Hoffmannia cryptoneura Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 53. 1940. Type: MEXICO: Chiapas, Mt. Ovando, 4 Apr 1936, *E. Matuda 944* (Holotype F 898899 (photo PTBG); Isotypes MICH, n.v., MO (photos MEXU, PTBG), TEX-LL (photos MEXU, PTBG)).

Hoffmannia culminicola Standl. & L. O. Williams, Ceiba 1: 166. 1950. Type: HONDURAS: Morazán, Cerro de Uyuca, ca. 1600 m, 2 Mar 1947, *P. C. Standley 4797* (Holotype F 1256864 (photos MEXU, PTBG); Isotype EAP, n.v.).

Hoffmannia cuneatissima B. L. Rob., Proc. Amer. Acad. Arts 45: 407. 1910. Type: MEXICO: Morelos, mountain canyon near Cuernavaca, 6000 ft., 29 May 1898, *C. G. Pringle 7662* (Holotype GH, n.v.; Isotype US 334830 (photos MEXU, PTBG)).

Hoffmannia davidsoniae Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 53. 1940. Type: PANAMA: Chiriquí, Boquete District, Bajo Chorro, 6000 ft., 26 Jan 1938, *M. E. Davidson 216* (Holotype F 915570 (photo PTBG); Isotypes A, n.v., MO, US (photos MEXU, PTBG)).

Hoffmannia decurrens Standl., Contr. U.S. Natl. Herb. 20: 205. 1919. Type: COSTA RICA: Forêts de Santa Rosa del Copey,

1800–2000 m, Apr 1898, *A. Tonduz 12230* (Holotype US 392077 (photos MEXU, PTBG); Isotypes P, 2 sheets (photos MEXU, PTBG)).

Hoffmannia discolor (Lem.) Hemsl., Biol. Centr.-Amer., Bot. 2: 36. 1881. *Campylobotrys discolor* Lem., Fl. Serres 3: Misc. 37. *fig.* 1847. Type: Not designated, based on cultivated plants grown from seed collected in Mexico by H. Galeotti. Note: A specimen at P ["en herb. Houtte Juin 1857. Hort. Parisei"] and a specimen at G ["Mexici, Oaxaca, 3000', fl. albis, *Galeotti 7183*"] may correspond with Galeotti's seed collection and represent authentic cultivated material. *Higginsia*.

Hoffmannia dotae Standl., J. Wash. Acad. Sci. 18: 181. 1928. Type: COSTA RICA: San José, vicinity of Santa María de Dota, 1500–1800 m, 26 Dec 1925–3 Jan 1926, *P. C. Standley & J. Valerio 43277* (Holotype US 1253172 (photos MEXU, PTBG)).

Hoffmannia eliasii Dwyer, Ann. Missouri Bot. Gard. 56: 276. 1969. Type: PANAMA: Darién, Río Cuasi mainstream, 2.5 miles S of Tres Bocas, 28 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 1129* (Holotype MO 1982892 (photos MEXU, PTBG)).—**Hoffmannia subauriculata** Standl.

Hoffmannia excelsa (Kunth) K. Schum. in Mart., Fl. Bras. 6(6): 327. 1889. *Psychotria excelsa* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 355. 1819. Type: MEXICO: Veracruz, Xalapa, *A. Bonpland 1445* (Holotype presumably P-Bonpland, n.v.; Isotypes B, n.v. (photo MO), P (photos MEXU, PTBG)). *Deppea*.

Hoffmannia fimbrianthera Dwyer, Ann. Missouri Bot. Gard. 56: 277. 1969. Type: PANAMA: Río Teribe, just below Puerto Palenque, 350 m, 12 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 556* (Holotype MO 1999724).—**Hoffmannia inamoena** Standl.

Hoffmannia gentryi Dwyer, Ann. Missouri Bot. Gard. 67: 230. 1980. Type: PANAMA: Darién, Cerro Tacarcuna, summit camp, along stream N of camp, 1550–1650 m, 1 Feb 1975, *A. Gentry & S. Mori 14061* (Holotype MO 2353753; Isotype MO 2423663).

Hoffmannia gesnerioides (Oerst.) Kuntze, Rev. Gen. Pl. 285. 1891. *Ophryococcus gesnerioides* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjoebenhavn 1852: 53. 1853. Type: NICARAGUA: Segovia, Monte Pantasmo, Jan 1848, *Oersted 11823* (Holotype C, n.v. (photos F, MO); Isotype F).

Hoffmannia ghiesbreghtii (Lem.) Hemsl., Biol. Centr.-Amer., Bot. 2: 36. 1881. *Campylobotrys ghiesbreghtii* Lem., Illust. Hort. 8: *pl. 279*. 1861. Type: Not designated, based on cultivated material from seed collected by Ghiesbreght, probably in Chiapas, Mexico. *Higginsia*.

Hoffmannia hamelioides Standl., J. Wash. Acad. Sci. 15: 8. 1925. Type: COSTA RICA: San José, between Aserrí and Tarbaca, 1600–1800 m, 12 Feb 1924, *P. C. Standley 34149* (Holotype US 1152904 (photos MEXU, PTBG)).

Hoffmannia hammelii C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 174. 1993. Type: COSTA RICA: Puntarenas, near Sirena, Corcovado National Park, 0–200 m, 5 Jul 1977, *R. L. Liesner 2907* (Holotype CR, n.v.; Isotype MO).

Hoffmannia haydenii Dwyer, Ann. Missouri Bot. Gard. 56: 277. 1969. Type: PANAMA: Chiriquí, Cerro Campana, Jul 1965, *s. M. V. Hayden 117* (Holotype MO 2030831). Note: In the protologue the type locality is incorrectly cited as "Finca Collins, ca. 5000 ft." —**Hoffmannia subauriculata** Standl.

Hoffmannia hondurensis Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 329. 1929. Type: HONDURAS: Atlántida, Lancetilla Valley, 200–500 m, 6 Dec 1927–20 Mar 1928, *P. C. Standley 52905* (Holotype F 582885 (photo PTBG); Isotype US (photos MEXU, PTBG)).

Hoffmannia huehueteca Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 249. 1947. Type: GUATEMALA: Huehuetenango, Sierra de los Cuchumatanes, Cerro Negro, 2 miles east of Las Palmas, 1600–2000 m, 31

Aug 1942, *J. A. Steyermark 51697* (Holotype F 1132825 (photo PTBG)).

Hoffmannia inamoena Standl., J. Wash. Acad. Sci. 18: 179. 1928. Type: COSTA RICA: Guanacaste, Los Ayotes, near Tilarán, 600 m, 21 Jan 1926, *P. C. Standley & J. Valerio 45421* (Holotype US 1254102 (photos MEXU, PTBG)).

Hoffmannia ixtlanensis Lorence, Novon 4: 121, *fig. 2a, b*. 1994. Type: MEXICO: Oaxaca, Distr. de Ixtlán, Sierra de Juárez; ruta 175 Tuxtepec a Oaxaca, ca. 5 km al N de Vista Hermosa, 1260 m, 14 Apr 1982, *D. H. Lorence, R. Torres C. & R. Cedillo T. 4013* (Holotype MEXU; Isotypes MO, PTBG).

Hoffmannia josefina Standl., J. Wash. Acad. Sci. 15: 8. 1925. Type: COSTA RICA: San José, between Aserrí and Tarbaca, 1800 m, 12 Feb 1924, *P. C. Standley 34143* (Holotype US 1152900 (photos MEXU, PTBG)).—**Hoffmannia arborescens** Donn. Sm.

Hoffmannia kirkbridei Dwyer, Ann. Missouri Bot. Gard. 56: 278. 1969. Type: PANAMA: Bocas del Toro, Quebrada Huron, ca. 300–400 ft., 11 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 429* (Holotype MO 1968253).—**Hoffmannia vesiculifera** Standl.

Hoffmannia lancistigma Dwyer, Ann. Missouri Bot. Gard. 56: 279. 1969. Type: PANAMA: Chiriquí, Boquete, Cerro Horqueta, 5000–6000 ft., 8 Aug 1967, *J. D. Dwyer & S. M. V. Hayden 7735* (Holotype MO 2065523).

Hoffmannia laxa Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 116. 1940. Type: COSTA RICA: Alajuela, Cantón de San Carlos, Sucre, 1000 m, 30 Mar 1939, *A. Smith F1851* (Holotype F 980999 (photo PTBG); Isotype US (photos MEXU, PTBG)).

Hoffmannia lenticellata Hemsl., Diag. Pl. Nov. Mexic. 30. 1879. Type: MEXICO: Veracruz, region d'Orizaba, Río Blanco, 29 Août 1866, *Bourgeau 2992* (Lectotype P, here designated (photos MEXU, PTBG); Isolectotype P (photos MEXU, PTBG)). Syntypes: MEXICO: Veracruz, Orizaba, *Botteri 974* (Syntype P, photos MEXU, PTBG); Jalapa, *Linden 1* (Syntype K, n.v.). The *Bourgeau 2992* collection at P was chosen as lectotype, because it is most representative, with flowers, fruits, and full-sized leaves.—**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Hoffmannia leucocarpa Standl., J. Wash. Acad. Sci. 15: 9. 1925. Type: COSTA RICA: San José, Las Nubes, 1300–1600 m, Mar 1924, *P. C. Standley 38340* (Holotype US 1153121 (photos MEXU, PTBG)).

Hoffmannia lewisiana Dwyer, Ann. Missouri Bot. Gard. 56: 279. 1969. Type: PANAMA: Chiriquí, vicinity of Cerro Punta, 6800 ft., 31 May–1 Jun 1967, *Ridgway & Solis 2413* (Holotype MO 1966156).

Hoffmannia liesneriana L. O. Williams, Fieldiana, Bot. 36: 54. 1973. Type: COSTA RICA: Limón, Guápiles, a 2 millas al norte de Diamantes, 150 m, 9 Aug 1963, *A. Jiménez 1054 M.* (Holotype F 1690189 (photo PTBG)).

Hoffmannia lineolata Donn. Sm., Bot. Gaz. (Crawfordsville) 40: 5. 1905. Type: GUATEMALA: Alta Verapaz, Cubliquitz, 350 m, May 1902, *H. von Tuerckheim 8227* (Holotype US no 576514 (photos MEXU, PTBG); Isotypes US, 2 sheets (photos MEXU, PTBG)).—**Hoffmannia regalis** (Hook. f.) Hemsl.

Hoffmannia longicalycina Dwyer, Ann. Missouri Bot. Gard. 56: 280. 1969. Type: PANAMA: Darién, Cuasí-Caná Trail between Cerro Campamiento and La Escalera to paramo, E of Tres Bocas, 30 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 1278* (Holotype MO 2165098; Isotype MO 1686749).—**Status uncertain**, probably **Amphidaysa** sp.

Hoffmannia longipetiolata Pol., Linnaea 41: 567. 1877. Type: COSTA RICA: In sylvis primaevis Carpinterae, 24 Jun 1875, *H. Polakowsky 134* (B, presumably destroyed (photo F), lectotype fragment F, here designated (photo PTBG)). Syntype: COSTA RICA: In sylvis primaevis Carpinterae, 24 Jun 1875, *H. Polakowksy 140* (B, presumably destroyed). The fragment of *Polakowsky 134* at F is here designated as lectotype.

Hoffmannia longipetiolata Pol. var. *minor* Pol., Linnaea 41: 568. 1877. Type: COSTA RICA: In sylvis primaevis Carpinterae, Jun 1875, *H. Polakowsky 144* (Holotype B, presumably destroyed).—**Hoffmannia longipetiolata** Pol.

Hoffmannia macrophylla (Planch.) Hemsl., Biol. Centr.-Amer., Bot. 2: 37. 1881. *Higginsia macrophylla* Planch., Fl. Serres 5: 482d. 1849. Type: Not designated, based on cultivated material grown from seeds collected in Guatemala.—**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Hoffmannia macrophylla Standl., J. Wash. Acad. Sci. 15: 9. 1925. Not *H. macrophylla* (Planch.) Hemsl., 1881. Type: COSTA RICA: Cartago, Cerro de La Carpintera, 1500–1850 m, Feb 1924, *P. C. Standley 35636* (Holotype US 1152957 (photos MEXU, PTBG); Isotype US 1152958 (photos MEXU, PTBG)). —**Hoffmannia leucocarpa** Standl.

Hoffmannia macrosiphon, Standl., Field Mus. Nat. Hist., Bot. ser. 17: 276. 1937. Type: GUATEMALA: Quezaltenango, Volcán de Zunil, 8000 ft., 4 Aug 1934, *A. F. Skutch 937* (Holotype F 813468 (photo PTBG); Isotype A, n.v.).

Hoffmannia manussatani Dwyer, Ann. Missouri Bot. Gard. 67: 234. 1980. Type: PANAMA: Bocas del Toro, Róbalo Trail, N slopes of Cerro Horqueta, 6000–7000 ft., 5–7 Aug 1947, *Allen 4978* (Holotype MO 1636310).

Hoffmannia mexicana (Link, Klotzsch & Otto) Hemsl., Biol. Centr.-Amer., Bot. 2: 37. 1881. *Higginsia mexicana* Link, Klotzsch & Otto, Ic. Pl. Rar. Hort. Ber. 1: 57, *t. 23*. 1841. Type: Not designated, based on material of Mexican origin cultivated at the Berlin Botanical Garden.—**Hoffmannia excelsa** (Kunth) K. Schum.

Hoffmannia minuticarpa Dwyer & Lorence, Novon 4: 122, *fig. 2c, d*. 1994. Type: MEXICO: Veracruz, Mun. de Soteapan, Cumbres de Bastonal, ca. 10–11 km al SE de Tebanca, 1200 m, 26 Apr 1982, *R. Cedillo T., D. Lorence & G. Ibarra M. 1280* (Holotype MEXU; Isotype MO).

Hoffmannia montana L. O. Williams, Fieldiana, Bot. 36: 55. 1973. Type: GUATEMALA: Quezaltenango, Volcán Zunil, 8000 ft., 4 Aug 1934, *A. F. Skutch 936* (Holotype F 934132 (photos MEXU, PTBG); Isotype A (photo PTBG)).

Hoffmannia morii Dwyer, Ann. Missouri Bot. Gard. 67: 236. 1980. Type: PANAMA: Chiriquí, N of San Félix at Chiriquí-Bocas del Toro border, on Cerro Colorado copper mine road along continental divide, 5000–5500 ft., 5 May 1975, *S. Mori & J. Kallunki 5915* (Holotype MO 2259023).—**Hoffmannia vesiculifera** Standl.

Hoffmannia nebulosa Standl. in Yunck., Field Mus. Nat. Hist., Bot. Ser. 17: 396. 1938. Type: HONDURAS: Comayagua, above the plains of Siguatepeque, near summit of range above El Achote, 1850 m, 1 Aug 1936, *T. G. Yuncker, R. F. Dawson & H. R. Youse 6252* (Holotype F 857687 (photo PTBG)).

Hoffmannia nesiota Donn. Sm., Bot. Gaz. (Crawfordsville) 61: 374. 1916. Type: COSTA RICA: Cocos Island, Wafer Bay, 18 Jun 1898, *H. Pittier 12387* (Holotype US 941381 (photos MEXU, PTBG)).

Hoffmannia nicotianifolia (M. Martens & Galeotti) L. O. Williams, Fieldiana, Bot. 36: 56. 1973. *Psychotria nicotianifolia* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 229. 1844 [as *nicotianaefolia*]. Type: MEXICO: Veracruz, Cordillera près Xalapa, 3000 pieds, 1840, *H. Galeotti 7066* (Holotype presumably BR, n.v.; Isotype P (photos MEXU, PTBG)).

Hoffmannia nubium Standl. & L. O. Williams, Ceiba 1: 167. 1950. Type: HONDURAS: Morazán, drainage of the Río Yeguare, at about long. 87°W, lat. 14°N, 6000 ft., 20 Jul 1948, *S. F. Glassman 1996* (Holotype US 2215976 (photos MEXU, PTBG); Isotypes F, GH (photo PTBG), MEXU, WIS). —**Hoffmannia cryptoneura** Standl.

Hoffmannia oreogena L. O. Williams, Fieldiana, Bot. 36: 57. 1973. Type: HONDURAS: La Paz, Cordillera Guajiquiro, Montaña Verde, aldea Las Marías, 2100 m, 23 May 1964, *A. Molina R. & A. R. Molina*

14052 (Holotype F 1616225 (photo PTBG); Isotype EAP, n.v.).

Hoffmannia oreophila L. O. Williams, Fieldiana, Bot. 36: 57. 1973. Type: NICARAGUA: Matagalpa, Cordillera Central de Nicaragua between Matagalpa and Jinotega, Disparate de Potter, near Santa María de Ostuma, 1500 m, 20–24 Feb 1963, *L. O. Williams, A. Molina R. & T. Williams 24709* (Holotype F 1606614 (photo PTBG); Isotype EAP, n.v.).—**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Hoffmannia orizabensis Standl., Contr. U.S. Natl. Herb. 20: 205. 1919. Type: MEXICO: Veracruz, region of Orizaba, 1855, *Mueller 1359* (Holotype GH, n.v.).

Hoffmannia ostaurea Dwyer, Ann. Missouri Bot. Gard. 56: 280. 1969. Type: PANAMA: Bocas del Toro, Río Terrible between Quebrada Huron and Puerto Palenque, 120–140 m, 12 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 501* (Holotype MO 1982893).

Hoffmannia pallidiflora Standl., J. Wash. Acad. Sci. 15: 9. 1925. Type: COSTA RICA: San José, La Hondura, 1300–1700 m, 16 Mar 1924, *P. C. Standley 37877* (Holotype US 1153101 (photos MEXU, PTBG)).—**Hoffmannia viridis** Rusby

Hoffmannia panamensis Standl., Contr. U.S. Natl. Herb. 20: 204. 1919. Type: PANAMA: Chiriquí, above El Boquete, forests along the Río Ladrillo and vicinity, 1200–1300 m, 6 Mar 1911, *H. Pittier 3056* (Holotype US 677443 (photos MEXU, PTBG)).—**Hoffmannia psychotriifolia** (Benth. in Oerst.) Griseb.

Hoffmannia phoenicopoda K. Schum., Notizbl. Bot. Gart. Berlin 2: 276. 1899. Type: Not designated, based on material cultivated in the Berlin Botanical Garden of uncertain origin, probably from Mexico or Central America.

Hoffmannia piratarum Standl., J. Wash. Acad. Sci. 18: 180. 1928. Type: COSTA RICA: Cocos Island, Forêts humides de la vallée de Wafer, 10–200 m, Jan 1902, *H. Pittier 16259* (Holotype US 579835 (photos MEXU, PTBG); Isotype GH (photo PTBG)).

Hoffmannia pittieri Standl., Contr. U.S. Natl. Herb. 18: 140. 1916. Type: PANAMA: Chiriquí, between Alto de las Palmas and top of Cerro de la Horqueta, 2100–2268 m, 18 Mar 1911, *H. Pittier 3247* (Holotype US 677642 (photos MEXU, PTBG)).

Hoffmannia psychotriifolia (Benth. in Oerst.) Griseb., Fl. Brit. W. Ind. 321. 1861. *Higginsia psychotriifolia* Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 50. 1853 [as *psychotriaefolia*]. Type: COSTA RICA: In monte Barba (Volcán de Barba), 6000 ft., May 1847, *Oersted 11507* (Holotype C, n.v. (photos F, MO); Isotype US (photos MEXU, PTBG)).

Hoffmannia pusilla L. O. Williams, Fieldiana, Bot. 34: 117. 1972. Type: GUATEMALA: Alta Verapaz, between Sepacuité and Secoyocté, 1100 m, 24 May 1905, *H. Pittier 348* (Holotype US 1083004 (photos MEXU, PTBG)).—**Pinarophyllon bullatum** Standl.

Hoffmannia pustulata Dwyer, Ann. Missouri Bot. Gard. 67: 240. 1980. Type: PANAMA: Colón, Río Guanche, pressed from cultivation, May–Jun 1972, *R. L. Dressler s.n.* (Holotype MO 2178490 (photo PTBG)).

Hoffmannia quadrifolia Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 250. 1947. GUATEMALA: Zacapa, Sierra de las Minas, around the summit of Monte Virgen, ca. 2400 m, 12–13 Jan 1942, *J. A. Steyermark 42600* (Holotype F 1133818 (photo PTBG)).

Hoffmannia racemifera Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 249. 1947. Type: GUATEMALA: Izabal, Cerro San Gil, 300–900 m, 25 Dec 1941, *J. A. Steyermark 41910* (Holotype F 1134162 (photos PTBG); Isotypes F 1134161 (photos PTBG), US (photos MEXU, PTBG)).

Hoffmannia ramonensis Standl., J. Wash. Acad. Sci. 18: 180. 1928. Type: COSTA RICA: Río Barranca à San Juan, près de San Ramón, 1300–1400 m, 25 Apr 1913, *A. Tonduz 17812* (Holotype US 861910 (photos MEXU, PTBG)).—**Hoffmannia dotae** Standl.

Hoffmannia refulgens (Hook. f.) Hemsl., Biol. Centr.-Amer., Bot. 2: 37. 1881. *Higginsia refulgens* Hook. f., Bot. Mag. *tab. 5346*. 1862. Type: Based on plants grown at Kew from seed thought to be from South America, but most probably from Central America or Chiapas, Mexico (Holotype presumably K, n.v.).

Hoffmannia regalis (Hook. f.) Hemsl., Biol. Centr.-Amer., Bot. 2: 37. 1881. *Higginsia regalis* Hook. f., Bot. Mag. *tab. 5280*. 1861. Type: Based on plants grown at Kew presumably from Mexican seed (Holotype presumably K, n.v.). *Campylobotrys*.

Hoffmannia rexmontis Dywer, Ann. Missouri Bot. Gard. 67: 241. 1980. Type: PANAMA: Chiriquí, NW side of Cerro Pando, 21 Jul 1971, *T. Croat 15934* (Holotype MO 2692337; Isotypes MO 2692338, MO 2150879).—**Hoffmannia pallidiflora** Standl.

Hoffmannia rhizantha Standl., Carnegie Inst. Wash. Publ. 461: 90. 1935. Type: BRITISH HONDURAS (BELIZE): Esperanza Trail, 630 m, 26 Jun 1934, *W. A. Schipp S-731* (Holotype F 729968 (photo PTBG)).

Hoffmannia riparia Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 214. 1937. Type: GUATEMALA: Quezaltenango, Colomba, 720 m, 24 Sep 1934, *A. F. Skutch 1291* (Holotype A, n.v. (photo and fragment F)). —**Hoffmannia regalis** (Hook. f.) Hemsl.

Hoffmannia rosei B. L. Rob., Proc. Amer. Acad. Arts 45: 407. 1910. Type: MEXICO: Nayarit, Tepic, near Pedro Paulo, 3 Aug 1897, *J. N. Rose 1968* (Holotype US 300860 (photos MEXU, PTBG); Isotype GH, n.v.). —**Hoffmannia cuneatissima** B. L. Rob.

Hoffmannia rotata Donn. Sm., Bot. Gaz. (Crawfordsville) 18: 204. 1893. Type: GUATEMALA: Quiché, San Miguel Uspantán, 7000 ft., Apr 1892, *Heyde & Lux 3169B* (Lectotype US 943496 (photos MEXU, PTBG), here designated). Syntype: GUATEMALA: Quiché, San Miguel Uspantán, 7000 ft., Apr 1892, *Heyde & Lux 3174* (P (photos MEXU, PTBG)). The US sheet of *Heyde & Lux 3169B* was selected as lectotype as it is most complete, with intact leaves, flowers, and inflorescences.

Hoffmannia rotundata Standl., Contr. U.S. Natl. Herb. 20: 204. 1919. Type: MEXICO: Chiapas, Cerro del Boquerón, Jun 1914, *C. A. Purpus 7268* in part (Holotype MO 765057). —**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Hoffmannia rubripigmenta Dywer, Ann. Missouri Bot. Gard. 56: 283. 1969. Type: PANAMA: Darién, between upper Río Membrillo and Camp 7 on construction road to San Blas, 100–800 m, 26-28 Apr 1967, *J. A. Duke 10870* (Holotype MO 1981851).

Hoffmannia sessilifolia L. O. Williams, Phytologia 25: 463. 1973. Type: GUATEMALA: Baja Verapaz, Sierra de las Minas, above Purulhá, 1600 m, 2 Jan 1973, *L. O. Williams, A. Molina R. & T. P. Williams 41977* (Holotype F 1716220 (photo PTBG); Isotype 1716221).

Hoffmannia steinvorthii Fosberg, Sida 2: 388. 1966. Type: COSTA RICA: Heredia, south slope of Volcán Barba, 2000 m, 26 Jun 1965, *W. H. Hatheway & A. Jiménez 1461* (Holotype US 2562634 (photos MEXU, PTBG); Isotypes F, GH, n.v.).—**Hoffmannia arborescens** Donn. Sm.

Hoffmannia steyermarkii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 192. 1940. Type: GUATEMALA: San Marcos, between Canjulá and La Unión, near southeast portion of Volcán de Tacaná, 2000–3000 m, 22 Feb 1940, *J. A. Steyermark 36426* (Holotype F 1035015 (photo PTBG); Isotype A, n.v.).

Hoffmannia strigillosa Hemsl., Diag. Pl. Nov. 31. 1879. Type: MEXICO: Without precise locality, *Sallé s.n.* (Holotype K, n.v.).

Hoffmannia subauriculata Standl., J. Wash. Acad. Sci. 18: 179. 1928. Type: COSTA RICA: Cartago, El Muñeco, on the Río Navarro, 1400–1500 m, 6–7 Mar 1926, *P. C. Standley & R. Torres R. 50956* (Holotype US 1306554 (photos MEXU, PTBG)).

Hoffmannia teruae L. O. Williams. & A. R. Molina, Fieldiana, Bot. 36: 59. 1973. Type: GUATEMALA: San Marcos, near Aldea Fraternidad, between San Rafael Pie de la

Cuesta and Palo Gordo, west facing slopes of Sierra Madre Mountains, 1800–2400 m, 10–18 Dec 1963, *L. O. Williams, A. Molina R. & T. P. Williams 26028* (Holotype F 1651553 (photo PTBG); Isotype EAP, n.v.).

Hoffmannia tetrastigma Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 336. 1899. Type: GUATEMALA: Santa Rosa, Zamorora, 1800 m, Apr 1893, *Heyde & Lux 4490* (Holotype US 354989 (photos MEXU, PTBG); Isotypes F, US, 2 sheets (photos MEXU, PTBG)).

Hoffmannia tonduzii Standl., Contr. U.S. Natl. Herb. 20: 205. 1919. Type: COSTA RICA: Forêts de Las Vueltas, Tucurrique, 635–700 m, May 1899, *A. Tonduz 13373* (Holotype US 941386 (photos MEXU, PTBG)).
—**Hoffmannia longipetiolata** Pol.

Hoffmannia trichocalyx Standl., J. Wash. Acad. Sci. 18: 181. 1928. Type: COSTA RICA: Alajuela, vicinity of Fraijanes, 1500–1700 m, 12–13 Feb 1926, *P. C. Standley & R. Torres R. 47690* (Holotype US 1305242 (photos MEXU, PTBG); Isotype US 1305243 (photos MEXU, PTBG)).

Hoffmannia tuerckheimii Donn. Sm., Bot. Gaz. (Crawfordsville) 47: 254. 1909. var. **tuerckheimii**. Type: GUATEMALA: Alta Verapaz, bei Cobán, 1600 m, Mar 1908, *H. von Tuerckheim II.2160* (Holotype US 941383 (photos MEXU, PTBG); Isotype US 941384 (photos MEXU, PTBG)).

Hoffmannia tuerckheimii Donn. Sm. var. **glabra** Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 250. 1947. Type: GUATEMALA: El Progreso, Sierra de las Minas, Montaña Canahui, between Finca San Miguel and summit of mountain, upper limits of Finca Caieta, 1600–2300 m, 10 Feb 1942, *J. A. Steyermark 43807* [*43806* in protologue] (Holotype F 1133774 (photo PTBG)).

Hoffmannia uniflora Standl., Contr. U.S. Natl. Herb. 20: 204. 1919. Type: GUATEMALA: Alta Verapaz, Cobán, 1100 m, Feb 1908, *H. von Tuerckheim II.2107* (Holotype US 941382 (photos MEXU, PTBG)).

Hoffmannia valerii Standl., J. Wash. Acad. Sci. 18: 178. 1928. Type: COSTA RICA: Guanacaste, El Arenal, 600 m, 20 Mar 1923, *J. Valerio 57* (Holotype US 1206194 (photos MEXU, PTBG)).

Hoffmannia vesiculifera Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 285. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp, Chiriquí Trail, 750 m, Jan–Mar 1928, *G. P. Cooper 231* (Holotype F 579284 (photo PTBG)).

Hoffmannia viridis Rusby, Descr. N. Sp. S. Amer. Pl. 134. 1920. Type: COLOMBIA: Santa Marta, *H. H. Smith 2649* (Holotype NY, n.v., photo and fragment F).

Hoffmannia vulcanicola Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 251. 1947. Type: GUATEMALA: Sololá, southern slopes of Volcán de Atitlán above Finca Moca, 1000–1250 m, 20 Jun 1942, *J. A. Steyermark 47931* (Holotype F 1132754 (photo PTBG)).

Hoffmannia wilsonii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 117. 1940. Type: GUATEMALA: Alta Verapaz, Finca Los Alpes, 1200 m, 21 Mar 1939, *C. L. Wilson 344* (Holotype F 968020 (photo PTBG)).

Hoffmannia witheringioides Dwyer, Ann. Missouri Bot. Gard. 67: 244. 1980. Type: PANAMA: Veraguas, Río Segundo Braso, 8 km beyond Escuela Agrícola Alto Piedra beyond Santa Fé, 750 m, 24 Jul 1974, *T. B. Croat 25551* (Holotype MO 2214610; Isotype MO 2207374).

Hoffmannia woodsonii Standl., Ann. Missouri Bot. Gard. 28: 471. 1941. Type: PANAMA: Chiriquí, vicinity of Callejón Seco, Volcán de Chiriquí, 1700 m, 17 Jul 1940, *R. E. Woodson, Jr. & R. W. Schery 503* (Holotype MO 1210619 (photo PTBG); Isotypes F 1085625 (photo PTBG), GH, n.v.).
—**Hoffmannia longipetiolata** Pol.

Holtonia Standl., Trop. Woods. 30: 37. 1932. Type: Holtonia myriantha (Standl.) Standl. Herein treated as a synonym of *Elaeagia* Wedd.]

Holtonia myriantha (Standl.) Standl., Trop. Woods 30: 37. 1932. *Sickingia myriantha* Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Type: COLOMBIA: Magdalena:

Las Nubes road, region of Santa Marta, 1200 m, 3 Dec 1898, *H. H. Smith 1810* (Holotype F 138660; Isotypes MO, NY, n.v., US, n.v., W, n.v., Y, n.v.). *Simira*.—**Elaeagia myriantha** (Standl.) C. M. Taylor & Hammel

Houstonia L., Sp. Pl. 1: 101. 1753. Type: Houstonia caerulea L. [Herein treated as a synonym of *Hedyotis* L., although some authors (e.g., Terrell, 1996) recognize *Houstonia* as a genus.]

Houstonia acerosa (A. Gray) Benth. & Hook. f., Gen. Pl. 2: 60. 1873. *Hedyotis acerosa* A. Gray, Pl. Wright. 1: 81. 1852. Type: U.S.A.: Texas, high prairies from Live Oak Creek to Las Moras, *C. Wright 237* (Holotype GH, n.v.). *Oldenlandia*.—**Hedyotis acerosa** A. Gray

Houstonia acerosa (A. Gray) Benth. & Hook. f. subsp. *polypremoides* (A. Gray) Terrell, Brittonia 31: 168. 1979. *Houstonia polypremoides* A. Gray, Proc. Amer. Acad. Arts 21: 379. 1886. Type: MEXICO: Chihuahua, Santa Eulalia Mountains, 26 Sep 1885, *C. G. Pringle 356* (Lectotype GH, n.v.; Isolectotypes F, MO (photos MEXU, PTBG), US (photos MEXU, PTBG); designated by Lewis, 1968).—**Hedyotis acerosa** A. Gray var. **polypremoides** (A. Gray) W. H. Lewis

Houstonia angustifolia Michx., Fl. Bor. Amer. 1: 85. 1803. Type: U.S.A.: Florida, in submaritimus Floridae, collector not cited (Holotype presumably P, n.v.).—**Hedyotis nigricans** (Lam.) Fosberg

Houstonia angustifolia Michx. var. *scabra* S. Watson, Proc. Amer. Acad. Arts 18: 97. 1883. Type: MEXICO: Coahuila, Saltillo, Caracol Mountains, 1–15 Apr 1880, *E. Palmer 410* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).—**Hedyotis nigricans** (Lam.) Fosberg

Houstonia arenaria Rose, Contr. U.S. Natl. Herb. 1: 70. 1890. Type: MEXICO: Baja California, La Paz, 20 Jan–5 Feb 1890, *E. Palmer 28* (Holotype US 47260 (photos MEXU, PTBG); Isotypes F, GH, n.v.).—**Hedyotis arenaria** (Rose) W. H. Lewis

Houstonia asperuloides (Benth.) A. Gray, Proc. Amer. Acad. Arts 5: 158. 1860. *Hedyotis asperuloides* Benth., Bot. Voy. Sulphur 19, *pl. 13*. 1844. Type: MEXICO: Baja California, Cabo San Lucas, *Barclay s.n.* (Holotype BM, n.v.).—**Hedyotis asperuloides** Benth.

Houstonia asperuloides (Benth.) A. Gray var. *brandegeana* (Rose) Wiggins in Shreve & Wiggins, Veg. Fl. Sonoran Desert 2: 1399. 1964. *Houstonia brandegeanna* Rose, Contr. U.S. Natl. Herb. 1: 83. 1890. Type: MEXICO: Baja California, La Paz, 20 Jan–5 Feb 1890, *E. Palmer 31* (Holotype US 47259 (photos MEXU, PTBG); Isotypes F, GH, n.v.).—**Hedyotis asperuloides** Benth. f. **brandegeana** (Rose) W. H. Lewis

Houstonia bouvardioides (Seem.) Benth. & Hook. f., Gen. Pl. 2: 60. 1873. *Hedyotis bouvardioides* Seem., Bot. Voy. Herald 2: 296. 1856. Type: MEXICO: Without precise locality [Durango ?], Sierra Madre, *Seemann s.n.* (Holotype BM, n.v.; Isotypes C, n.v., fragment F (photo PTBG), GH, n.v.).—**Bouvardia bouvardioides** (Seem.) Standl.

Houstonia brandegeana Rose, Contr. U.S. Natl. Herb. 1: 83. 1890. Type: MEXICO: Baja California, La Paz, 20 Jan–5 Feb 1889, *E. Palmer 31* (Holotype US 47259 (photos MEXU, PTBG); Isotypes F, GH, n.v.).—**Hedyotis asperuloides** Benth. f. **brandegeana** W. H. Lewis

Houstonia brevipes Rose, Contr. U.S. Natl. Herb. 1: 83. 1890. Type: MEXICO: Baja California, Santa Rosalía, 24 Feb–3 Mar 1889, *E. Palmer 202* (Holotype US 47258 (photos MEXU, PTBG); Isotypes F, GH, n.v., US (photos MEXU, PTBG)).—**Hedyotis brevipes** (Rose) W. H. Lewis

Houstonia coccinea Andr., Bot. Repos. *pl. 106.* 1800. Type: No herbarium specimens are known to exist, only the drawing *pl. 106.*—**Bouvardia ternifolia** (Cav.) Schltdl.

Houstonia drymarioides Standl., J. Wash. Acad. Sci. 18: 162. 1928. Type: MEXICO: Tamaulipas, on mountains south of Victoria, 1000 m, 9 Apr 1926, *R. Runyon 870*

(Holotype US 1315865 (photos MEXU, PTBG); Isotype F).—**Hedyotis drymarioides** (Standl.) W. H. Lewis

Houstonia fasciculata A. Gray, Proc. Amer. Acad. Arts 17: 203. 1882. Syntypes: U.S.A.: Texas, Presidio, *Bigelow s.n.* (GH); New Mexico, Organ Mountains, *G. R. Vasey s.n.* (GH, n.v.); MEXICO: Coahuila, near Parras and Monclova, *E. Palmer 404* (GH, n.v.), *E. Palmer 406* (GH, n.v.).—**Hedyotis intricata** Fosberg

Houstonia fruticosa Willd. ex Roem. & Schult., Syst. 3: 527. 1818. Type: VENEZUELA: Monagas, Caripe, *Humboldt s.n.* (B, presumably destroyed).—**Declieuxia fruticosa** (Willd. ex Roem. & Schult.) Kuntze

Houstonia fruticosa Rose, Contr. U.S. Natl. Herb. 1: 132. 1892. Not *Hedyotis fruticosa* L., 1753, nor Willd. ex Roem. & Schult., 1818. Type: MEXICO: Baja California, Carmen Island (Isla Carmen), 1–7 Nov 1890, *E. Palmer 885* (Holotype US 47256 (photos MEXU, PTBG); Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Hedyotis mucronata** Benth.

Houstonia gracilenta I. M. Johnst., Proc. Calif. Acad. IV, 12: 1174. 1924. Type: MEXICO: Baja California, San Diego Island, rocky island slope facing sea, 2 May 1921, *I. M. Johnston 3927* (Holotype UC, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)).—**Hedyotis gracilenta** (I. M. Johnst.) W. H. Lewis

Houstonia gracilis Brandegee, Zoë 5: 238. 1907. Not *Hedyotis gracilis* DC., 1830. Type: MEXICO: Veracruz, Orizaba, May 1904, *C. A. Purpus 1251* (Holotype UC, n.v.; Isotypes F, MO (photos MEXU, PTBG)).—**Hedyotis exigula** W. H. Lewis

Houstonia humifusa (A. Gray) A. Gray, Proc. Amer. Acad. Arts 4: 314. 1859. *Hedyotis humifusa* A. Gray, Boston J. Nat. Hist. 6: 216. 1850. Type: U.S.A.: Texas, near Fredrickburg, 1847, *F. Lindheimer 621* (Holotype GH, n.v.; Isotypes BM, n.v., K, n.v., MICH, n.v., MO, PH, n.v., US).

Houstonia kingii Terrell, Brittonia 32: 491, *fig. 2*. 1980. Type: MEXICO: Oaxaca, E-facing slopes, mountains along route 175, 28 km by road south of Valle Nacional on way to Ixtlán de Juárez, ca. 2000 m, 30 Jul 1959, *R. M. King 2107* (Holotype MICH, n.v.; Isotype MICH, n.v.).—**Hedyotis kingii** (Terrell) G. L. Nesom

Houstonia latifolia Willd. ex Roem. & Schult., Syst. 527. 1808. Not *Hedyotis latifolia* (M. Martens & Galeotti) Walp., 1846. Type: America borealis, *Mühlenberg s.n.* (presumably B-WI, n.v.).—**Hedyotis exigula** W. H. Lewis

Houstonia longipes S. Watson, Proc. Amer. Acad. Arts 18: 97. 1883. Syntypes: MEXICO: Without precise locality, States of Coahuila and Nuevo Léon, Feb–Oct 1880, *E. Palmer 394* (GH, n.v.; US 47845 (photos MEXU, PTBG)); Nuevo Léon, Monterrey, Feb 1–26 1880, *E. Palmer 395* (GH, n.v., US 70739 (photos MEXU, PTBG), US 1390542 (photos MEXU, PTBG)).—**Hedyotis palmeri** (A. Gray) W. H. Lewis

Houstonia mucronata (Benth.) B. L. Rob., Proc. Amer. Acad. Arts 45: 401. 1910. *Hedyotis mucronata* Benth., Bot. Voy. Sulphur 19. 1844. Type: MEXICO: Baja California, Magdalena Bay, *Barclay s.n.* (Holotype BM, n.v.).—**Hedyotis mucronata** Benth.

Houstonia mullerae (Fosberg) Terrell, Brittonia 31: 169. 1979. *Hedyotis mullerae* Fosberg, Lloydia 4: 288. 1941. Type: MEXICO: Coahuila, Mun. de Cuatro Ciénegas, Cañón del Agua, Sierra de la Madera, 9 Sep 1939, *C. H. Muller 3234* (Holotype US 2133305 ex NA (photos MEXU, PTBG); Isotype GH, n.v.).—**Hedyotis mullerae** Fosberg

Houstonia nigricans (Lam.) Fernald, Rhodora 42: 299. 1940. *Gentiana nigricans* Lam., Encycl. 2: 645. 1786. Type: MEXICO: Collector unknown, (presumably P-LAM, n.v.).—**Hedyotis nigricans** (Lam.) Fosberg

Houstonia palmeri A. Gray, Proc. Amer. Acad. Arts 17: 202. 1882. Syntypes: MEXICO: Coahuila, Sierra Madre, 40 mi. south of Saltillo, 25–31 Jul 1880, *E. Palmer 397* (GH, n.v., US 47431 (photos MEXU, PTBG); *E. Palmer 398* (GH, n.v., F (2 sheets), US 70740

(photos MEXU, PTBG)).—**Hedyotis palmeri** (A. Gray) W. H. Lewis

Houstonia parvula Brandegee, Zoë 5: 221. 1905. Not *Hedyotis parvula* (A. Gray) Fosberg, 1943. Type: MEXICO: Sinaloa, vicinity of Culiacan, 12 Oct 1904, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)). —**Hedyotis sinaloae** W. H. Lewis

Houstonia peninsularis Brandegee, Zoë 5: 160. 1903. Type: MEXICO: Baja California, Cape Region, Sierra de la Trinidad, Nov 1902, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)). —**Hedyotis peninsularis** (Brandegee) W. H. Lewis

Houstonia polypremoides A. Gray, Proc. Amer. Acad. Arts 21: 379. 1886. Type: MEXICO: Chihuahua, Santa Eulalia Mountains, 26 Sep 1885, *C. G. Pringle 356* (Lectotype GH; n.v.; Isolectotypes F, MO (photos MEXU, PTBG), US (photos MEXU, PTBG); designated by Lewis, 1968). Syntype: MEXICO: Chihuahua, Santa Eulalia Mountains, 29 May 1885, *C. G. Pringle 16* (GH, n.v., US (photos MEXU, PRBG)).—**Hedyotis polypremoides** (A. Gray) Shinners

Houstonia polypremoides var. *bigelovii* Greenman, Proc. Amer. Acad. Arts 32: 291. 1897. Type: U.S.A.: Florence Mountains, Jun 1852, *Bigelow 437* (Holotype GH, n.v.). —**Hedyotis polypremoides** (A. Gray) W. H. Lewis

Houstonia prostrata Brandegee, Zoë 5: 105. 1901. Not *Hedyotis prostrata* Blume, 1823 nor Korth., 1851. Type: MEXICO: Baja California, La Palma, Cape Region, 25 Sep 1899, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US 382879 (photos MEXU, PTBG), US 735791 (photos MEXU, PTBG)).—**Hedyotis vergrandis** W. H. Lewis

Houstonia prostrata Brandegee var. *parvula* (Brandegee) Wiggins in Shreve & Wiggins, Veg. Fl. Sonoran Desert 2: 1399. 1964. *Houstonia parvula* Brandegee, Zoë 5: 221. 1905. Not *Hedyotis parvula* (A. Gray) Fosberg, 1943. Type: MEXICO: Sinaloa, vicinity of Culiacan, 12 Oct 1904, *T. S. Brandegee s.n.* (Holotype UC, n.v.; Isotypes GH, n.v., US (photos MEXU, PTBG)).—**Hedyotis sinaloae** W. H. Lewis

Houstonia rubra Cav., Icon. 5: 48, *t. 474, fig. 1.* 1799. Type: MEXICO: Hidalgo, Ixmiquilpan, *Née s.n.* (Holotype presumably MA, n.v.). —**Hedyotis rubra** (Cav.) A. Gray

Houstonia serpyllacea (Schltdl.) C. L. Sm. ex Greenman, Proc. Amer. Acad. Arts 32: 284. 1897. Hedyotis serpyllacea Schltdl., Linnaea 9: 599. 1834. Type: MEXICO: México, inter La Joya et San Salvador, Jun 1829, *Schiede & Deppe 265* (Holotype presumably HAL, n.v.; Isotypes B (photo MO), F (photo PTBG), MO).—**Hedyotis serpyllacea** Schltdl.

Houstonia sharpii Terrell, Brittonia 32: 490, *fig. 1.* 1980. Type: MEXICO: Hidalgo, camino entre Metepec y Tenango de Doria, entre 16 y 31.5 km al NNE de Tulancingo, 18 km N.NE. de Metepec, 29 Mar 1974, *S. D. Koch 7423* (Holotype US 2754863 (photos MEXU, PTBG); Isotypes CHAPA, ENCB, MEXU). —**Hedyotis sharpii** (Terrell) G. L. Nesom

Houstonia teretifolia Terrell, Brittonia 31: 166. 1979. Type: MEXICO: Coahuila, 12 km NNE of Las Margaritas on easternmost ridge of Sierra de las Margaritas, 1300–1400 m, 24 Sep 1972, *M. C. Johnston, F. Chiang & T. Wendt 9508E* (Holotype TEX, n.v.). —**Hedyotis teretifolia** (Terrell) G. L. Nesom

Houstonia triflora (Kunth) A. Gray, Proc. Amer. Acad. Arts 4: 314. 1860. *Bouvardia triflora* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 386. 1820. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO)). —**Bouvardia multiflora** (Cav.) Schult. & Schult. f.

Houstonia umbratilis B. L. Rob., Proc. Amer. Acad. Arts 45: 401. 1910. Type: MEXICO: Nuevo León, shaded cliffs of mountains, near Monterrey, 25 Apr 1906, *C. G. Pringle 13877* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)). —**Hedyotis umbratilis** (B. L. Rob.) W. H. Lewis

Houstonia wrightii A. Gray, Proc. Amer. Acad. Arts 17: 202. 1882. Type: MEXICO: Nuevo

León, shaded cliffs of mountains, near Monterrey, 25 Apr 1906, *C. G. Pringle 13877* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Hedyotis wrightii** (A. Gray) Fosberg

Houstonia xestosperma (B. L. Rob. & Greenman) Terrell, Brittonia 32: 492. 1980. *Oldenlandia xestosperma* B. L. Rob. & Greenman, Proc. Amer. Acad. Arts 32: 41. 1896. Type: MEXICO: Oaxaca, Sierra de San Felipe, open glades, 8000 ft., Jun 1894, *C. G. Pringle 4692* (Lectotype GH, n.v.; Isolectotypes BM, n.v., F, K, n.v., MO (photos MEXU, PTBG), MSC, n.v., PH, n.v., UC, US, 2 sheets (photos MEXU, PTBG), VT, n.v.; designated by Terrell, 1980). *Hedyotis*.—**Bouvardia xestosperma** (B. L. Rob. & Greenman) Terrell & S. D. Koch

Isertia Schreb., Gen. Pl. 1: 234, n. 602. 1789. Type: Isertia coccinea (Aubl.) Vahl

Isertia deamii Bartlett, Proc. Amer. Acad. Arts 43: 59. 1907. Type: GUATEMALA: Izabal, Puerto Barrios, 24 Feb 1905, *C. C. Deam 48* (Holotype GH, n.v.).—**Isertia haenkeana** DC.

Isertia deamii Bartlett var. *stenophylla* Donn. Sm., Bot. Gaz. (Crawfordsville) 61: 374. 1916. Type: COSTA RICA: Boca Culebra, plaines des Pacifique, 50 m, 20 Jan 1898, *H. Pittier 11989* (Holotype US 941413 (photo PTBG); Isotypes F (photo PTBG), P, n.v., fragment F).—**Isertia haenkeana** DC.

Isertia haenkeana DC., Prodr. 4: 437. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).

Isertia laevis (Triana) B. M. Boom, Brittonia 36: 433. 1984. *Cassupa laevis* Triana, Ann. Sci. Nat., Bot., Sér 4, 9: 44. 1858. Type: COLOMBIA: Cundinamarca, *Triana 1838* (Lectotype P; Isolectotypes BR, n.v., COL, n.v., L, n.v., P, n.v., US, n.v.; designated by Boom, 1984).

Isertia panamensis (Standl.) Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 346. 1931. *Cassupa panamensis* Standl., Contr. U.S. Natl. Herb. 18: 135. 1916. Type: PANAMA: Colón, along Río Fató, 10–100 m, 8 Jul 1911, *H. Pittier 3889* (Holotype US 678963 (photo PTBG); Isotype US (photo PTBG)).—**Isertia laevis** (Triana) B. M. Boom

Isertia scorpioides B. M. Boom, Brittonia 36: 435. 1984. Type: PANAMA: Colón, Atlantic side of Isthmus on road to Piña, 25 Aug 1967, *J. H. Kirkbride, Jr. & S. M. V. Hayden 316* (Holotype NY, n.v.; Isotypes MO (2 sheets; photos PTBG), NY, n.v.).

Ixora L., Sp. Pl. 1: 110. 1753. Type: Ixora coccinea L.

Ixora alba Sessé & Moç., La Naturaleza, ser. 2, 1. app. 16. 1887. Not Ixora alba L., 1753, nor Roxb., 1814, nor Sus. ex Wight & Arn., 1834. Type: MEXICO: Habitat in India ad montibus Mazatlan (presumably MA, n.v.).—**Status uncertain.**

Ixora americana Jacq., Hort. Schönbr. 3: 4, *pl. 257*. 1798. Type: Cultivated at Schöbrunn, Vienna, said to have been brought from Mexico.—**Bouvardia ternifolia** (Cav.) Schltdl.

Ixora aphylla Sessé & Moç., Pl. Nuev. Hispan. 16. 1887; La Naturaleza, ser. 2, 1. app. 16, ed. 2, 15. 1887. Type: MEXICO: Habitat prope Xochistlan, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Ixora casei Hance in Walp., Ann. Bot. Syst. 2: 754. 1852. Type: CAROLINE ISLANDS: Strong Island, *Q. W. Case s.n.* (Isotype or possible Holotype K, n.v.). For typification see Fosberg & Sachet (1989a), who note that var. *casei* is cultivated in Mesoamerica.

Ixora coccinea L., Sp. Pl. 1: 110. 1753. Lectotype: Rheede, Hortus malabaricus 2: 17, *t. 13*. 1679. Designated by Fosberg & Sachet (1989b), who note that *Ixora coccinea* L. var. *coccinea* and var. *intermedia* Fosberg & Sachet are cultivated in Mexico and Central America.

Ixora coccinea L. var. *intermedia* Fosberg & Sachet, Baileya 23: 80. 1989. Type: VIRGIN ISLANDS: St. Croix, Teague Bay, cultivated, *F. R., Fosberg 55279* (Holotype US, n.v.)—**Ixora coccinea** L.

Ixora finlaysoniana Wall. ex G. Don, Gen. Hist. Dichlam. Pl. 3: 572. 1834. Type: EAST

INDIES: *Wallich Catalog 6166* (Holotype K, n.v. (microfiche MO)). Cultivated in Mexico and Central America.

Ixora floribunda (A. Rich.) Griseb., Cat. Pl. Cub. 134. 1866. *Siderodendron floribundum* A. Rich. in Sagra, Hist. Cuba 11: 24. 1850. Type: CUBA: Without precise locality, *A. Richard s.n.* (Holotype presumably P, n.v.).

Ixora nicaraguensis Wernham, J. Bot. 50: 243. 1912. Type: NICARAGUA: Chontales, *Seemann 117* (Holotype BM, n.v.).

Ixora occidentalis L., Syst., ed. 10, 2: 893. 1759. Type: JAMAICA: Based on P. Browne, Hist. Jam. *t. 6, fig. 2* (LINN, n.v.), and Plumier, Icon. *tab. 156, f. 2* (ed. Burmannus). —**Faramea occidentalis** (L.) A. Rich.

Ixora pulcherrima Sessé & Moç., La Naturaleza, ser. 2, 1. app. 16. 1887. Type: MEXICO: Habitat in montibus Mazatlan, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Ixora rauwolfioides Standl., Trop. Woods 11: 25. 1927. Type: PANAMA: Changuinola Valley, 1927, *G. P. Cooper & G. M. Slater 93* [Yale 10274] (Holotype US 1315888 (photo PTBG); Isotype F).—**Ixora nicaraguensis** Wernham

Ixora spinosa (Jacq.) Lam., Encycl. Méth. Bot. 3: 344. 1789. *Chomelia spinosa* Jacq., Enum. Pl. Carib. 12. 1760. Type: COLOMBIA: Near Cartagena, *Jacquin s.n.* (location unknown). —**Chomelia spinosa** Jacq.

Ixora ternifolia Cav., Icon. 4: 3, *t. 305.* 1797. Type: Based on cultivated material grown at Madrid from seed collected in Mexico (Lectotype is *tab. 305*; designated by Blackwell, 1968).—**Bouvardia ternifolia** (Cav.) Schltdl.

Ixora uniflora Sessé & Moç., La Naturaleza, ser. 2, 1. app. 16. 1887. Type: MEXICO: Habitat Michaelapoli, *Sessé & Moçiño s.n.* (presumably MA, n.v.; Fl. Mex. Ic. 26 (G-DEL, n.v.).—**Status uncertain.**

Javorkaea Bohridi & J. Komlódi, Acta Bot. Hung. 29: 16. 1983. Type: Javorkaea hondurensis (Donn. Sm.) Borhidi & J. Komlódi. [Herein treated as a synonym of *Rondeletia* L.]

Javorkaea hondurensis (Donn. Sm.) Borhidi & J. Komlódi, Acta Bot. Hung. 29: 16. 1983. *Rondeletia hondurensis* Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 335. 1899. Type: HONDURAS: Santa Bárbara, Río Chamelecón, 300 m, Dec 1888, *C. Thieme 5267* (Holotype US 943502 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), US (2 sheets, photos MEXU, PTBG)). —**Rondeletia hondurensis** Donn. Sm.

Joosia H. Karst., Fl. Columb. 1: 9, *tab. 5*. 1858. Type: Joosia umbellifera H. Karst.

Joosia panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 262. 1980. Type: PANAMA: Veraguas, road between Escuela Agrícola Alto de Piedra above Santa Fé and Río Dos bocas, 730–770 m, 26 Jul 1974, *T. B. Croat 25932* (Holotype MO 2248047 (photo PTBG)).—**Joosia umbellifera** H. Karst.

Joosia umbellifera H. Karst., Fl. Columb. 1: 9, *tab. 5*. 1858. Type: COLOMBIA: Meta, Servitá, *Karsten & Triana s.n.* (Lectotype W 134852, n.v.; Isolectotype NY, n. v.; designated by Andersson in Brittonia 49: 32. 1997).

Kohleria Regel. [Gesneriaceae]

Kohleria filisepala Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 107. 1940. Type: MEXICO: Chiapas, Mt. Ovando, 16 Dec 1936, *E. Matuda 574* (Holotype F 916483 (photo PTBG); Isotypes MEXU, US). —**Omiltemia filisepala** (Standl.) C. V. Morton

Ladenbergia Klotzsch in Hayne, Getreue Darstell. Gew. 14: *pl. 15*. 1846. Lectotype: Ladenbergia moritziana Klotzsch (Designated by Andersson & Taylor, 1994: 17.)

Ladenbergia brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1323. 1938. Type: COSTA RICA: San Ramón, San Miguel, La Palma, San Pedro, 20–25 Mar 1932, *A. M. Brenes 15146* (Holotype F 856805 (photo PTBG)).

Ladenbergia bullata (Wedd.) Standl., Trop. Woods 34: 41. 1933. *Cascarilla bullata* Wedd., Ann. Sci. Nat., Bot., sér. 3, 10: 11. 1848. Type: PERU: Puuo, Prov. de Carabaya, Jan–Feb 1847, *Weddell 4358* (Holotype P-JU, n.v.; Isotypes G, n.v., K, n.v.). Note: Although Dwyer (1980) erroneously recorded this species from Panama, it is endemic to the sourthern Andes (L. Andersson, pers. comm. 1996).

Ladenbergia laurifolia Dwyer, Ann. Missouri Bot. Gard. 67: 265. 1980. Type: PANAMA: Veraguas, beyond Río Tres Brazos, 9 km from Santa Fé, *T. B. Croat 25586* (Holotype MO, n.v.).

Ladenbergia macrocarpa (Vahl) Klotzsch in Hayne, Getreue Darstell. Gew. 14: tab. 15. 1846. *Cinchona macrocarpa* Vahl, Schr. naturh. Ges. Kopenhagen 1(1): 20. 1793. Type: COLOMBIA: In regno Santa Fé, *Ortega s.n.* (Lectotype BM, n.v.; designated by Andersson in Andersson & Taylor, 1994: 16).

Ladenbergia sericophylla Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1324. 1938. Type: COSTA RICA: Two miles southeast of San Isidro del General, Aug 1936, *R. E. Danforth 32* (Holotype F; Isotype GH (photo PTBG)).

Ladenbergia valerii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1324. 1938. Type: COSTA RICA: La Paz de San Ramón, 1225 m, Jun 1925, *Brenes 4296* (Holotype F).

Lagenanthus Gilg [Gentianaceae]

Lagenanthus parviflorus Ewan, Mutisia 4: 5. 1952. Type: PANAMA: Coclé, region north of El Valle of Antón, 1000 m, *P. H. Allen 3601* (Holotype MO, n.v.).—**Hillia triflora** var. **pittieri** (Standl.) C. M. Taylor

Lasianthus Jack, Trans. Linn. Soc. 14: 125. 1823. Type: Lasianthus cyanocarpus Jack

Lasianthus panamensis (Dwyer) Robbr., Ann. Missouri Bot. Gard. 69: 427. 1982. *Dressleriopsis panamensis* Dwyer, Ann. Missouri Bot. Gard. 67: 154. 1980. Type: PANAMA: Panamá, near La Eneida, beyond Cerro Jefe, 25 Jul 1968, *R. L. Dressler 3560* (Holotype MO 2267568 (photo PTBG); Isotypes MEXU, US (photos MEXU, PTBG)).

Lasionema D. Don, Lond. & Edinb. Phil. Mag. 2: 377. 1833. Type: Lasionema roseum (Ruiz & Pav.) D. Don (*Cinchona rosea* Ruiz & Pav.). (Here treated as a synonym of *Macrocnemum* R. Br.)

Lasionema glabrescens Benth., Bot. Voy. Sulphur 105. 1845. Type: COSTA RICA: Lagartos Bay (Carno Bay), Gulf of Nicoya, 12–16 Feb 1839, *G. W. Barclay 2780* (Holotype BM, n.v.; Isotype F (photo PTBG)). *Macrocnemum*.—**Macrocnemum roseum** (Ruiz & Pav.) Wedd.

Laugeria Vahl ex Hook. f. in Benth. & Hook. f., Gen. 2: 101. 1873. Not Laugeria L., 1764. Lectotype: Laugeria resinosa Vahl (*Laugeria* Vahl, Eclog. 1: 26. 1796, lacked a generic description. For discussion see Little, 1959: 27.)

Laugeria lucida Sw., Prodr. Veg. Ind. Occ. 48. 1788. Type: JAMAICA: Without precise localiity, *Swartz s.n.* (presumably S, n.v.). *Antirhea*, *Stenostomum*.—**Stenostomum lucidum** (Sw.) C. F. Gaertn.

Laugieria Jacq., Enum. Pl. Carib. 2: 16. 1760. Type: Laugieria odorata Jacq. [Herein treated as a synonym of *Guettarda* L.]

Laugieria odorata Jacq., Enum. Pl. Carib. 2: 16. 1760. Type: CUBA: Ex Carthagena et Havana, *Jacquin s.n.* (Lectotype P, n.v.; designated by Steyermark, 1972: 360). —**Guettarda odorata** (Jacq.) Lam.

Limnosipanea Hook. f. in Hook., Icon. Pl. 11: 38, *t. 1050*. 1868. Type: Limnosipanea spruceana Hook. f.

Limnosipanea palustris (Seem.) Hook. f. in Hook., Icon. Pl. 11: 38, *t. 1050*. 1868. *Sipanea palustris* Seem., Bot. Voy. Herald 136. 1853. Type: PANAMA: In a swamp near Panama City, *Seemann 347* (Holotype BM, in part [excluding specimen of *Microlicia*,

Melastomataceae], n.v. (photo MO)).
—**Sipanea palustris** Seem.

Lindenia Benth., Pl. Hartw. 84. 1841. Type: Lindenia rivalis Benth. (See Darwin (1976: 427) and Farr et al. (1979: 1620) for discussions regarding publication of the generic names *Lindenia* vs. *Siphonia*.) [Herein treated as a synonym of *Augusta* Pohl. See discussion of *Augusta* by Kirkbride, 1997.]
Lindenia acutiflora Benth. in Hooker, Icon. Pl. 5: *tab. 475*. 1842. Type: MEXICO: Veracruz, Puente Nacional, 1838, *Linden 358* (Holotype K, n.v. (photo MO)).—**Augusta rivalis** (Benth.) J. H. Kirkbr.
Lindenia radicans Wernham, J. Bot. 52. 226. 1914. Type: MEXICO: Oaxaca, shaded places on rocks at crossing of the river near Tocotepeque, Jul 1839, *T. Hartweg s.n.* (Holotype K, n.v. (photo MO)).
—**Habroneuron radicans** (Wernham) S. P. Darwin
Lindenia rivalis Benth., Pl. Hartweg. 84. 1841. Type: GUATEMALA: In rivis, la Vera Paz, *T. Hartweg 581* (Holotype K, n.v. (photo MO)).
Siphonia rivalis Benth., Pl. Hartweg. 84. 1841. Note: According to Farr et al. (1979: 1620) the name *Siphonia* was actually printed, but was crossed out in ink and the name *Lindenia* substituted in manuscript in all copies before distribution. The correction is printed on p. 351.—**Augusta rivalis** (Benth.) J. H. Kirkbr.
Lindenia rivalis Benth. f. *glabra* S. P. Darwin, J. Arnold Arbor. 57: 439. 1976. Type: MEXICO: Chiapas, Chicomucelo [as "Chicomuselo"], 800 m, 14 Jul 1941, *E. Matuda 4449* (Holotype US 2087017 (photos MEXU, PTBG); Isotypes A, n.v., F, MO (photos MEXU, PTBG), NY, n.v.).
—**Lindenia rivalis** Benth.

Lonicera L. [Caprifoliaceae]
Lonicera alba L., Sp. Pl. 175. 1753. Type: JAMAICA or BARBADOS: Material cultivated in the Clifford garden (possibly BM, n.v.). According to Howard (1989) a specimen in the Sloan herbarium may be an appropriate lectotype.—**Chiococca alba** (L.) Hitchc.

Loranthus Jacq. [Loranthaceae]
Loranthus guadalupensis DC., Prodr. 4: 294. 1830. Type: GUADALOUPE: Without precise locality, *Bertero s.n.* (Holotype G-DC, n.v. (microfiche IDC 800.666.II.2)).
—**Psychotria guadalupensis** (DC.) Howard

Lycium L. [Solanaceae]
Lycium japonicum Thunb., Nov. Gen. Pl. 132, *pl. 9*. 1798. Type: JAPAN: Collector and locality unknown (presumably UPS, n.v.).
—**Serissa japonica** (Thunb.) Thunb.

Lygodysodea Ruiz & Pav., Fl. Peruv. Chil. 32, *t. 5*. 1794. Type: Lygodysodea fetida Ruiz & Pav. [Herein treated as a synonym of *Paederia* L.]
Lygodysodea ciliata Bartl. ex DC., Prodr. 4: 470. 1830. Type: MEXICO: Ad Acahuitzola, *Haenke s.n.* (Holotype presumably PR, n.v.; not located by Puff, 1991).—**Paederia ciliata** (Bartl. ex DC.) Standl.

Machaonia Humb. & Bonpl., Pl. Aeqin. 1: 101. 1806. Type: Machaonia acuminata Humb. & Bonpl.
Machaonia acuminata Humb. & Bonpl., Pl. Aequin. 1: 101, *t. 29*. 1806. Type: ECUADOR: In ipsa urbe Guyaquil, *A. Bonpland 3828* (Holotype P-Bonpland, n.v.; Isotype P (photos MEXU, PTBG)).
Machaonia coulteri (Hook. f.) Standl., Contr. U.S. Natl. Herb. 20: 209. 1919. *Microsplenium coulteri* Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 4. 1873. Type: MEXICO: Hidalgo: Zimapán, *Coulter s.n.* (Holotype K, n.v.).
Machaonia fasciculata A. Gray, Proc. Amer. Acad. Arts 19: 77. 1883. Type: MEXICO: Without precise locality, *Coulter 1167* (Holotype GH, n.v.).—**Machaonia coulteri** (Hook. f.) Standl.
Machaonia floribunda Greenm., Proc. Amer. Acad. Arts 33: 488. 1898. Type: MEXICO: Tamaulipas, hills, Tampico, 16 Jun 1897,

C. G. Pringle 6641 (Holotype GH, n.v.; Isotypes A, n.v., MO, P (2 sheets; photos MEXU, PTBG), US (photos MEXU, PTBG)). —**Machaonia acuminata** Humb. & Bonpl.

Machaonia galeottiana Baill., Bull. Mens. Soc. Linn. Paris 1: 204. 1879. Type: CUBA: Le Havane, *H. Galeotti s.n.* (Holotype P (photo MO)). On the holotype label the word "Veracruz" is crossed out and "Le Havane" written in. As noted by Standley (1934: 222) the collection resembles no Mexican species. —**Machaonia havanensis** (Jacq.) Alain

Machaonia hahniana Baill., Bull. Mens. Soc. Linn. Paris 1: 204. 1879. Type: MEXICO: Puebla, Acatlán, Juillet 1865, *L. Hahn s.n.* (Holotype P (photos MEXU, MO, PTBG)).

Machaonia havanensis (Jacq. ex J. F. Gmel.) Alain, Phytologia 8: 370. 1962. *Spermacoce havanensis* Jacq. in J. F. Gmel., Syst. Nat. 2: 234. 1791. Type: Based on *Spermacoce fruticosa* Jacq., ined.? (type not located).

Machaonia lindeniana Baill., Bull. Mens. Soc. Linn. Paris 1: 204. 1879. Type: MEXICO: Campeche, Campèche, fl. en Juin, (Yucatán), *Linden s.n.* (Holotype P (photos MEXU, MO, PTBG)).

Machaonia martinezorum Lorence, Novon 4: 123, *fig. 3*. 1994. Type: MEXICO: Chiapas, Mun. de Ocosingo, a 50 km al S de Boca Lacantum, 130 m, 24 Jun 1986, *E. Martínez S. 19016* (Holotype PTBG 7356; Isotypes MEXU, MO).

Machaonia martinicensis (DC.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 193. 1940. *Tertrea martinicensis* DC., Prodr. 4: 481. 1830. Type: MARTINIQUE: *Richard s.n.* (Holotype P, n.v.).

Machaonia martinicensis (DC.) Standl. var. *dodgei* (Standl.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 193. 1940. *Machaonia rotundata* Griseb. var. *dodgei* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1326. 1938. Type: COSTA RICA: Beach between Río Sándio and Rió Tigre, 1 May 1930, *C. W. Dodge 7752* (Holotype F 890888 (photo PTBG); Isotype MO (photo PTBG)). —**Machaonia martinicensis** (DC.) Standl.

Machaonia pringlei A. Gray, Proc. Amer. Acad. Arts 21: 380. 1886. Type: MEXICO: Coahuila, limestone ledges, mountains, Jimulco, 27 Apr 1885, *C. G. Pringle 146* (Holotype GH, n.v.; Isotypes A, n.v., F (photos MEXU, PTBG), P (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Machaonia rotundata Griseb. var. *dodgei* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1326. 1938. Type: COSTA RICA: Beach between Río Sándoval and River Tigre, 1 May 1930, *C. W. Dodge 7752* (Holotype F 890888 (photo PTBG); Isotype MO (photo PTBG)). —**Machaonia martinicensis** (DC.) Standl.

Machaonia tysonii Dwyer, Ann. Missouri Bot. Gard. 53: 106. 1966. Type: PANAMA. Los Santos, thicket near man-made dam, main highway, Monagre Beach, *J. D. Dwyer 5067* (MO, not located in 6/1996). Note: John Dwyer (pers. comm. 24 March 1993) believes citation of this collection was a typographical error and the following collection actually represents the holotype: PANAMA: Along Quebrada Vital off Río Chucanagre, km 16 de Yavita, 4 Jul 1962, *J. A. Duke 5067* (Holotype MO 3725554 (photo PTBG)). In the *Flora of Panama* Rubiaceae treatment, Dwyer (1980) erroneously cited *Dwyer 5061* as the holotype; the latter specimen was not located at MO in 3/1993 or 6/1996.—**Machanonia acuminata** Humb. & Bonpl.

Machaonia velutina M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 134. 1844. Type: MEXICO: Veracruz, ravines de Puente Nacional, près Veracruz, *H. Galeotti 7104* (Holotype BR, n.v.; Isotype P (photos MEXU, MO, PTBG)).—**Machaonia acuminata** Humb. & Bonpl.

Machaonia veracruzeana Baill., Bull. Mens. Soc. Linn. Paris 1: 204. 1879. Nom. superfl., based on *Machaonia velutina* M. Martens & Galeotti, 1844.—**Machaonia acuminata** Humb. & Bonpl.

Macrocnemum P. Browne, Hist. Jam. 165. 1756. Type: Macrocnemum jamaicense L.

Macrocnemum candidissimum Vahl, Symb. 2: 38, *pl. 30*. 1791. Type: TRINIDAD: Vicinia

St. Marthae, *von Rohr s.n.* (Holotype C, n.v.). *Mussaenda*.—**Calycophyllum candidissimm** (Vahl) DC.

Macrocnemum coccineum Vahl, Symb. Bot. 2: 38. 1791. Type: TRINIDAD: Without precise locality, *von Rohr s.n.* (C, n.v.). *Mussaenda*. —**Warszewiczia coccinea** (Vahl) Klotzsch

Macrocnemum corymbosum Ruiz & Pav., Fl. Peruv. Prodr. 2: 48, *pl. 189*. 1799. Type: PERU: In Andium collibus et runcationibus calidis versus Chinchao, Acomayo, Pillao, Muña, *Ruiz Lopez & Pavón s.n.* (Presumably MA, n.v.).—**Condaminea corymbosa** (Ruiz & Pav.) DC.

Macrocnemum exsertum Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 45. 1853. Type: COSTA RICA: Jarvis, 3000 ft., *Oersted s.n.* (Holotype presumably C, n.v.).—**Pogonopus exsertus** (Oerst.) Oerst.

Macrocnemum glabrescens (Benth.) Wedd., Ann. Sci. Nat., Bot., Sér. 4, 1: 76. 1854. *Lasionema glabrescens* Benth., Bot. Voy. Sulphur 105. 1844. Type: COSTA RICA: Lagartos Bay (Carno Bay), Gulf of Nicoya, 12–16 Feb 1839, *G. W. Barclay 2780* (Holotype BM, n.v.; Isotype F (photo PTBG)).—**Macrocnemum roseum** (Ruiz & Pav.) Wedd. Note: *Macrocneum glabrescens* is regarded as a taxonomic synonym of *M. roseum* by Andersson in Andersson & Taylor (1994).

Macrocnemum pastoense G. Karst., Linnaea 30: 150. 1859. Type: COLOMBIA: Ad littora fluminis Mayo et Juanambu provinciae Pasto, *Karsten* (presumably W, n.v.).

Macrocnemum roseum (Ruiz & Pav.) Wedd., Ann. Sci. Nat., Bot., Sér. 4, 1: 76. 1854. *Cinchona rosea* Ruiz & Pav., Fl. Peruv. 2: 54. 1799. Type: PERU: Huánuco, Pozuzo, *Ruiz Lopez & Pavón s.n.* (Lectotype MA, n.v.; Isolectotypes BM, n.v., G, n.v., G-DC, n.v., K, n.v., MA, n.v., P, n.v.; designated by Andersson in Andersson & Taylor, 1994: 12).

Macrocnemum speciosus Jacq., Hort. Schoenbr. 1: 19. 1797. Type: VENEZUELA: Based on material cultivated at Schönbrunn, Vienna, said to have been brought from vicinity of Caracas, Venezuela (not located). —**Pogonopus speciosus** (Jacq.) K. Schum. Note: Standley & Williams (1975) and Dwyer (1980) incorrectly referred collections from Central America to this South American species; the Central American species is *Pogonopus exsertus* (Oerst.) Oerst.

Malanea Aubl., Hist. Pl. Guiane 1: 106, *t. 41*. 1775. Type: Malanea sarmentosa Aubl.

Malanea colombiana Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 66. 1930. Type: COLOMBIA: El Valle, *Pennell & Killip 5987* (Holotype US, n.v.: Isotypes GH, n.v., NY, n.v.).

Malanea erecta Seem., Bot. Voy. Herald 136. 1854. Type: PANAMA: Island of Taboga, Bay of Panama, *Seemann s.n.* (Holotype presumably BM, n.v.).

Mallostoma G. Karst., Fl. Columb. 2: 9, *t. 105*. 1862. Type: Mallostoma cachirense (G. Karst.) G. Karst. Based on Hedyotis cachirensis G. Karst. (=*Arcytophyllum cachirense* (G. Karst.) K. Schum.)

Mallostoma acerosa (A. Gray) Hemsl., Biol. Centr.-Amer., Bot. 2: 31. 1881. *Hedyotis acerosa* A. Gray, Pl. Wright. 1: 81. 1852. Type: U.S.A.: Texas, high prairies, from Live Oak Creek to the Las Moras, Jun 1849, *C. Wright 237* (Holotype GH, n.v.; Isotype US). *Ereicoctis, Houstonia, Oldenlandia*. —**Hedyotis acerosa** A. Gray

Mallostoma lavarum Donn. Sm., Enum. Pl. Guatemal. 5: 36. 1899. Type: PANAMA: Chiriquí, summit of Chiriquí Volcano, 3374 m, 12 Mar 1911, *W. R. Maxon 5349* (Holotype B, presumably destroyed (photo MO); Isotype US (photos MEXU, PTBG)). —**Arcytophyllum lavarum** (Donn. Sm.) K. Schum. ex Standl.

Mallastoma shannonii Donn. Sm., Bot. Gaz. (Crawfordsville) 18: 203. 1893. Type: GUATEMALA: Chimaltenango, Chicoy, 9000 ft., Mar 1892, *W. C. Shannon s.n.* (Holotype US 48603 (photos MEXU, PTBG); Isotype US 943475).—**Hedyotis serpyllacea** Schltdl.

Manettia Mutis ex L., Mant. Pl.: 553, 558. 1771, nom. cons. Type: Manettia reclinata L.

Manettia arboricola Lorence, Novon 3: 59. 1993. Type: PANAMA: Comarca de San Blas, El Llano-Cartí Rd., km 16.7, 350 m, trail west to waterfall 5 km from road, 16 Jun 1985, *G. de Nevers & S. Charnley 5907* (Holotype MO 3623655 (photo PTBG)).

Manettia barbata Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 47. 1853. Type: COSTA RICA: In Monte Aguacate, 2000 ft., Feb 1846, *Oersted 11521* (Holotype C, n.v. (photos MO, US); Isotypes K, n.v., US (2 sheets; photos MEXU, PTBG)).

Manettia bocataurensis Dwyer, Ann. Missouri Bot. Gard. 67: 278. 1980. Type: PANAMA: Bocas del Toro, along RR (railroad) near station at Milla 10, 27 Jul 1971, *T. B. Croat & D. M. Porter 16334* (Holotype MO 2166138 (photo PTBG)).—**Hedyotis lancifolia** K. Schum.

Manettia costaricensis Wernham, J. Bot. 41 (suppl.): 38. 1919. Syntypes: COSTA RICA: Tucurrique, déboisements de Las Vueltas, 650–700 m, Dec 1898, *A. Tonduz 12873* (B, presumably destroyed (photos F, MO; fragment F), BM, n.v., US 1390734 (photos MEXU, PTBG), US 354369). COSTA RICA: Without precise locality, 3500 ft., *Endres 2* (W, n.v. (fragment F)).—**Manettia reclinata** L.

Manettia estrellae Standl., J. Wash. Acad. Sci. 15: 6. 1925. Type: COSTA RICA: Cartago, La Estrella, 26–27 Mar 1924, *P. C. Standley 39224* (Holotype US 1153146 (photos MEXU, PTBG)).—**Manettia flexilis** Brandegee

Manettia flexilis Brandegee, Univ. Calif. Publ. Bot. 6: 196. 1915. Type: MEXICO: Chiapas, Cerro del Boquerón, Jun 1914, *C. A. Purpus 7118* (Holotype UC 174907, n.v.; Isotypes F, GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Manettia hirtella M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 238. 1844. Type: MEXICO: Oaxaca, cordillère orientale, au bords des rivières, dans les forêts de Tonaguia, 4000–5000 pieds, Jun 1840, *H. Galeotti 2635* (Holotype BR, n.v.).—**Status uncertain.**

Manettia hydrophila Dwyer, Ann. Missouri Bot. Gard. 67: 280. 1980. Type: PANAMA: Veraguas, mouth of Río Concepción, in swamp, 4 Dec 1967, *W. H. Lewis, T. B. Croat & J. L. Hawker 2822* (Holotype MO 2268375).—**Sipanea biflora** (L. f.) Cham. & Schltdl.

Manettia liebmannii Standl., J. Wash. Acad. Sci. 17: 337. 1927. Type: MEXICO: Oaxaca, Pelado [probably Cerro Pelón], *Liebmann 11485* [=*Liebmann Rubiaceae 147*] (Holotype C, n.v. (fragment US; photos MEXU, PTBG)).—**Hedyotis galeottii** (M. Martens) Terrell & Lorence

Manettia longicalycina Dwyer & Lorence, Novon 3: 61. 1993. Type: PANAMA: Coclé, Alto Calvario, 800–900 m, 20 Apr 1977, *J. P. Folsom & Jaslon 2665* (Holotype MO 2608777 (photo PTBG)).

Manettia longipedicellata C. M. Taylor, Novon 5: 202, *fig. 1A*. 1995. Type: COSTA RICA: Limón, Cantón de Matina, Cordillera Talamanca, 200 m, aguas abajo de la confluencia de la quebrada Cañabral con el río Barbilla, 10°00'10"N, 83°25'30"W, 5 Nov 1988, *G. Herrera 2290* (Holotype CR, n.v.; Isotype MO 3649361).

Manettia microphylla Lorence & Dwyer, Novon 3: 60. 1993. Type: PANAMA: Darién, Pirre Massif, Alturas de Nique, above Cana Mine, 850–1150 m, 2 Mar 1988, *G. McPherson 12189* (Holotype MO 3648261 (photo PTBG); Isotypes PTBG, SCZ).

Manettia orbifera Wernham, J. Bot. 57 (suppl.): 41. 1919. Type: GUATEMALA: Retalhuleu, *Bernoulli & Cairo 1649* (Holotype K, n.v.).—**Manettia reclinata** L.

Manettia panamensis Duchass. & Walp., Linnaea 23: 753. 1850. Type: PANAMA: *Duchassaing s.n.* (presumably GOET, n.v.).—**Manettia reclinata** L.

Manettia reclinata L., Mant. Pl. 2: 558. 1771. Type: Not designated. Note: this species is actually based on Colombian material seen by Mutis, not Mexican material. Apparently Linnaeus believed that Santa Fé de Bogotá

was the Santa Fé in Mexico (L. Andersson, pers. comm., 1996). No herbarium specimens are known to exist, and a neotype needs to be selected.

Manettia seleriana Loes., Verhandl. Bot. Verein Brandenburg 65: 107. 1923. Type: GUATEMALA: Izabal, Los Amates, 1 Jan 1897, *E. Seler & C. Seler 3309* (Holotype B, presumably destroyed (photos F, MO, US; fragment F); Isotype US (photos MEXU, PTBG)).—**Manettia reclinata** L.

Manettia stenophylla Donn. Sm., Bot. Gaz. (Crawfordsville) 56: 58. 1913. Type: COSTA RICA: Tucurrique, Las Vueltas, 635 m, Jan 1899, *A. Tonduz 12969* (Holotype US 943614 (photos F, MEXU, PTBG, US); Isotype B, destroyed (fragment F)).—**Manettia barbata** Oerst.

Manettia zimapanica Hemsl., Diag. Pl. Nov. Mexic. 30. 1879. Type: MEXICO: Hidalgo, Zimapán, *Coulter 203* (Holotype K, n.v.). —**Status uncertain.**

Mapourea Aubl., Hist. Pl. Guiane 1: 175. 1775. Type: Mapouria guianensis Aubl. [Herein treated as a synonym of *Psychotria* L.]

Mapourea chamissoana Loes., Verhandl. Bot. Verein Brandenburg 65: 112. 1923. Type: MEXICO: Veracruz, Tecolute [Tecolutla], *Schiede 1266* (Holotype B, presumably destroyed (photo MO)). *Psychotria*. —**Psychotria erythrocarpa** Schltdl.

Mapourea graciliflora (Benth.) Oerst., Amér. Centr. 17, *t. 14, fig. 6*. 1863. *Psychotria graciliflora* Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 35. 1853. Type: COSTA RICA: Alajuela, ad Naranjo, Apr 1847, *Oersted 11611* (Holotype C (photos F, MEXU, PTBG); Isotypes K, n.v., US (photos MEXU, PTBG)).—**Psychotria graciliflora** Benth.

Mapouria micrantha (Kunth) Wernham, Kew Bull. 1914: 69. 1914. Type: PERU (?): *A. Bonpland s.n.* (Holotype P-Bonpland, n.v. (fragment F)).—**Psychotria micrantha** Kunth

Mapouria miradorensis Oerst., Amér. Centr. 17, *t. 14, fig. 9*. 1863. Type: MEXICO: Veracruz, Mirador, in quercetum, 3000 ft., 1841–1843, *F. Liebmann 11662* (Lectotype C (photos MEXU, PTBG); Isolectotype US, n.v.; designated by Hamilton, 1989). Syntypes: MEXICO: Veracruz, Mirador, Apr 1847, *F. Liebmann 11577* (C (photos MEXU, PTBG); Mirador, *F. Liebmann 11614* (C (photos MEXU, PTBG)). *Psychotria*.—**Psychotria costivenia** Griseb. var. **costivenia**

Mapouria obovata Oerst., Amér. Centr. 17, *t. 14, figs. 3, 4*. 1863. Not *Psychotria obovata* Ruiz & Pav., 1799. Type: MEXICO: Veracruz, *F. Liebmann s.n.* (Holotype presumably C, n.v.). *Psychotria*.—**Psychotria quinqueradiata** Pol.

Mapouria papantlensis, Oerst., Amér. Centr. 17, *t. 14, fig. 5*. 1863. Type: MEXICO: Veracruz, Papantla, *f. Liebmann s.n.* (Holotype presumably C, n.v.). *Uragoga*.—**Psychotria papantlensis** (Oerst.) Hemsl.

Mapouria remota (Benth.) Muell. Arg., Flora 59: 459. 1876. *Psychotria remota* Benth., J. Bot. Hook. 3: 225. 1841. Type: BRAZIL: On the Rio Negro, *Schomburgk 963* (Holotype K, n.v. (photo NY); Isotypes F, W, n.v.). —**Psychotria remota** Benth.

Mapouria salicifolia Oerst., Amér. Centr. 17, *t. 14, fig. 2*. 1863. Not *Psychotria salicifolia* Kunth in Humb., Bonpl. & Kunth, 1819. Type: MEXICO: Oaxaca, Lacoba [Lacova], *F. Liebmann s.n.* (Holotype presumably C, n.v.). *Psychotria*.—**Psychotria papantlensis** (Oerst.) Hemsl.

Mapouria stipulata Oerst., Amér. Centr. 17, *t. 14, fig. 7*. 1863. Type: MEXICO: Veracruz, Papantla, *F. Liebmann 11615* (Lectotype C, here designated (photos MEXU, PTBG); Isolectotype C (photos MEXU, PTBG)). Syntype: MEXICO: Veracruz, Papantla, *F. Liebmann 11636* (C (photos MEXU, PTBG)). *Liebmann 11615*, a well preserved flowering specimen with a duplicate, is the best choice for lectotype. *Psychotria*.—**Psychotria costivenia** Griseb. var. **costivenia**

Mapouria tomentosa Oerst., Amér. Centr. 17, *t. 14, fig. 8*. 1863. Not *Psychotria tomentosa* Müll Arg. ex Mart., 1881, nor Hemsl., 1881. Type: MEXICO: Veracruz, prope Papantla, *F. Liebmann s.n.* (Holotype presumably C, n.v.).

—**Status uncertain**, probably **Psychotria micrantha** Kunth in Humbl., Bonpl. & Kunth
Mapouria trichogyne Muell. Arg. in Mart., Fl. Brasil. 6: 426. 188. Type: BRAZIL: Habitat in prov. de Alto Amazonas, prope Manaos ad Rio Negro, *Spruce s.n.* (B, presumably destroyed). *Geophila.*—**Geophila cordifolia** Miq.

Microsplenium Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 4. 1873. Type: Microsplenium coulteri Hook. f. [Herein treated as a synonym of *Machaonia* Humb. & Bonpl.]
Microsplenium coulteri Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 4. 1873. Type: MEXICO: Hidalgo, Zimapan, *Coulter* (Holotype K, n.v.).—**Machaonia coulteri** (Hook. f.) Standl.

Mitchella L., Sp. Pl. 1: 111. 1753. Type: Mitchella repens L.
Mitchella repens L., Sp. Pl. 1: 111. 1753. Type: U.S.A.: Habitat in Carolina, Terra Mariana, Virginia, Herb. Linn. 135.1 (Lectotype LINN, n.v.; designated by Reveal et al., 1987: 215).

Mitracarpum auct. [Herein treated under *Mitracarpus* Zucc. ex Schult., orthogr. cons.]

Mitracarpus Zucc. ex Schult. & Schult f. in Roem. & Schult., Mant. Pl. 3: 210 (as *Mitracarpum*), 399. 1827. Type: Mitracarpus scaber Zucc. ex Schult. & Schult. f.
Mitracarpus breviflorus A. Gray, Pl. Wright. 2: 68. 1853 (as *Mitracarpum breviflorum*). Type: MEXICO: Sonora, mountain ravines and hillsides near Santa Cruz, Sep 1851, *C. Wright 1120* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).—**Mitracarpus hirtus** (L.) DC.
Mitracarpus hirtus (L.) DC., Prodr. 4: 572. 1830. *Spermacoce hirta* L., Sp. Pl., ed. 2, 1: 148. 1762. Not *Spermacoce hirta* L., 1767, nor Sw., 1791. Type: JAMAICA: *Browne 'Spermacoce # 3'* (LINN 125.4, n.v.). For typification see Verdcourt (1975: 317–322).
Mitracarpus linearis Benth., Bot. Voy. Sulphur 20. 1844 (as *Mitracarpium lineare*). Type: MEXICO: Baja California, Cape [Cabo] San Lucas, *Hinds 65* (Holotype BM, n.v.).
Mitracarpus pallidus Hook. & Arn., Bot. Beech. Voy. 4: 30. 1840. Type: MEXICO: Realjo, collector probably *Sinclair s.n.* (Holotype presumably K, n.v.).
Mitracarpus rhadinophyllus (B. L. Rob.) L. O. Williams, Fieldiana, Bot. 29: 371. 1961. *Borreria rhadinophylla* B. L. Rob., Proc. Amer. Acad. 45: 409. 1910. Type: BRITISH HONDURAS (BELIZE): On dry, sandy pine ridges, 23 Oct 1905, *M. E. Peck 180* (Holotype GH, n.v.; Isotype NY, n.v.)
Mitracarpus schizangius DC., Prodr. 4: 572. 1830 (as *Mitracarpum schizangium*). Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).
Mitracarpus schizangius DC. var. *angustifolium* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 7. 1853. Type: NICARAGUA: Volcán El Viejo, *Oersted s.n.* (Holotype C, n.v.).—**Status uncertain.**
Mitracarpus villosus (Sw.) Cham. & Schltdl., Linnaea 3: 363. 1828. *Spermacoce villosa* Sw., Prodr. Veg. Ind. Occ. 29. 1788. Type: JAMAICA: *Swartz s.n.* (Holotype presumably BM, n.v.).—**Mitracarpus hirtus** (L.) DC.

Montamans Dwyer, Ann. Missouri Bot. Gard. 67: 284. 1980. Type: Montamans panamensis Dwyer [Herein treated as a synonym of *Psychotria* L.]
Montamans panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 286, *fig. 62*. 1980. Type: PANAMA: Chiriquí, Cerro Horqueta, rain forest, ca. 5500 ft., 20 Jul 1968, *J. D. Dwyer & B. Lallathin 8792* (Holotype MO 2163225 (photos MEXU, PTBG)).—**Psychotria aggregata** Standl.

Morinda L., Sp. Pl. 1: 176. 1753. Type: Morinda royoc L.
Morinda asperula Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 54. 1940. Type: GUATEMALA: Izabal, hilly pine forest near Quiriguá, 72–150 m, 26–27 Apr 1939, *P. C. Standley 72368* (Holotype F 991552 (photo PTBG)).

Morinda citrifolia L., Sp. Pl. 1: 176. 1753. Type: INDIA: (Holotype LINN 236.1, n.v. (microfiche MO)).

Morinda guatemalensis (Donn. Sm.) Steyerm., Mem. New York Bot. Gard. 23: 385. 1972. *Appunia guatemalensis* Donn. Sm., Bot. Gaz. (Crawfordsville) 48: 294. 1909. Type: GUATEMALA: Izabal, Livingston, Jun 1906, *H. von Tuerckheim III-230* (Holotype US 943501 (photos MEXU, PTBG)).—**Appunia guatemalensis** Donn. Sm.

Morinda laxa Bartl. ex DC., Prodr. 4: 449. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Status uncertain.**

Morinda mesochora Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 345. 1929. Type: BRITISH HONDURAS (BELIZE): Honey Camp, Orange Walk, Sep 1928, *C. L. Lundell 19* (Holotype F 580825; Isotype US (photos MEXU, PTBG)).

Morinda muscosa Jacq., Sel. Stirp. Amer. 65. 1763. Type: MARTINIQUE: *Jacquin s.n.* (location unknown).—**Psychotria muscosa** (Jacq.) Steyerm.

Morinda panamensis Seem., Bot. Voy. Herald 136. 1854. Type: PANAMA: Panamá, Chagres, 10 Feb 1850, *Fendler 148* (Holotype BM, n.v.; Isotypes GH, n.v., MO (photos MEXU, PTBG), US (photo PTBG)).

Morinda royoc L., Sp. Pl. 1: 176. 1753 [as *roioc*]. Type: Habitat in America calidiore, *Herb. Clifford 73, Morinda 1* (Lectotype BM; designated by Lorence, 1993: 68).

Morinda yucatanensis Greenm., Publ. Field Columbian Mus., Bot. Ser. 2: 262. 1907. Type: MEXICO: Yucatán, in brush lands about Izamal, 1895, *G. F. Gaumer 362* (Lectotype F 36165 (photo PTBG), here designated; Isolectotypes GH, n.v., US (photos MEXU, PTBG)). Note: in his protologue Greenman cited duplicates of *Gaumer 362* at both F and GH without designating a holotype. An additional duplicate exists at US. I have selected the excellent flowering and fruiting specimen at F as lectotype.—**Morinda royoc** L.

Mussaenda L., Sp. Pl. 1: 177. 1753. Type: Mussaenda frondosa L.

Mussaenda acutiflora Bartl. ex DC., Prodr. 4: 370. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 370.2)).—**Status uncertain.**

Mussaenda candidissima (Vahl) Roem. & Schult., Syst. Veg. 5: 251. 1819. *Macrocnemum candidissimum* Vahl, Symb. Bot. 2: 38, *pl. 30*. 1791. Type: TRINIDAD: Vicinia St. Marthae, *von Rohr s.n.* (Holotype C, n.v.).—**Calycophyllum candidissumum** (Vahl) DC.

Mussaenda coccinea (Vahl) Poir. in Lam., Encycl. Méth. 4: 394. 1797. *Macrocnemum coccineum* Vahl, Symb. Bot. 2: 38. 1791. Type: TRINIDAD: Without precise locality, *von Rohr s.n.* (Holotype C, n.v.). —**Warszewiczia coccinea** (Vahl) Klotzsch

Mussaenda erythrophylla Schumach. & Thonn., Beskr. Guin. Pl. 116. 1827. Type: TROPICAL AFRICA: Guinea, *Thonning s.n.* (Holotype presumably C, n.v.; probable Isotype G-DC, n.v. (microfiche 4: 371.8)). Cultivated in Mesoamerica.

Mussaenda formosa Jacq., Enum. Pl. Carib. 16. 1760. Type: COLOMBIA: Cartagena, *Jacquin s.n.* (presumably G, n.v.). *Randia*. —**Rosenbergiodendron formosum** (Jacq.) Fagerl.

Mussaenda glabra Vahl, Symb. Bot. 3: 38. 1794. Type: Collector and location unknown. Cultivated in Mesoamerica.

Mussaenda luteola Delile in Caill., Voy. Meroe 4: 65. 1827. Type: ARABIA: Nubia, collector unknown (Holotype presumably MPU, n.v.; probable isotype G-DC, n.v. (microfiche 4: 371.9)). Cultivated in Mesoamerica.

Mussaenda spinosa Sessé & Moç., La Naturaleza, ser. 2, 1: 36. 1888. Type: MEXICO: Habitat in Martinica, Indiarum Cartagine et calidis Novae Hispaniae regionibus, *Sessé & Moçiño 1583* (presumably MA, n.v. (fragment F)). —**Randia tetracantha** (Cav.) DC.

Mussaenda tetracantha Cav., Icon. Pl. 4: 20, *pl. 435*. 1799. Type: MEXICO: [Probably

Guerrero], cerca Acapulco, *Née s.n.* (presumably MA, n.v. (photos F, MEXU, MO)).—**Randia tetracantha** (Cav.) DC.

Nauclea L., Sp. Pl., ed. 2, 1: 243. 1762. Type: Nauclea orientalis (L.) L., based on Cephalanthus orientalis L.

Nauclea cadamba Roxb., Fl. Ind. 2: 121. 1824. Type: INDIA: *Rheede, Hort. Ind. Malabar. 3: tab. 33*, Katou-tsjaka (1678–1703). —**Neolamarckia cadamba** (Roxb.) Bosser

Nauclea tomentosa Willd. ex Roem. & Schult., Syst. Veg. 5: 221. 1819. Type: COLOMBIA: In ripa flumen Magdalenae prope Naers, *Humboldt s.n.* (Holotype B-W 3910, n.v.). —**Uncaria tomentosa** (Willd. ex Roem. & Schult.) DC.

Neolamarckia Bosser, Bull. Mus. Natl. Hist. Nat., Paris, Sér. 4, Sect. B, Adansonia 6(3): 247. 1984. Type: Neolamarckia cadamba (Roxb.) Bosser

Neolamarckia cadamba (Roxb.) Bosser, Bull. Mus. Natl. Hist. Nat., Paris, Sér. 4, Sect. B, Adansonia 6(3): 247. 1984. *Nauclea cadamba* Roxb., Fl. Ind. 2: 121. 1824. Type: INDIA: *Rheede, Hort. Ind. Malabar. 3: tab. 33*, Katou-tsjaka (1678–1703). Cultivated and naturalized in Costa Rica according to Burger & Taylor (1993).

Nernstia Urb., Symb. Antill. 9: 145. 1923. Type: Nernstia mexicana (Zucc. & Mart. ex DC.) Urb.

Nernstia mexicana (Zucc. & Mart. ex DC.) Urb., Symb. Antill. 9: 146. 1923. *Coutarea mexicana* Zucc. & Mart. ex DC., Prodr. 4: 350. 1830. Type: MEXICO: Without precise locality, *Martius* in 1829 (Holotype G-DC, n.v. (IDC 800.680: II.7)). *Cigarilla*.

Nertera Banks & Sol. ex C. F. Gaertn., Fruct. Sem. Pl. 1: 124, *pl. 26*. 1788. Nomen conservandum. Type: Nertera depressa Gaertn. [=Nertera granadensis (Mutis ex L. f.) Druce.] Note: *Nertera depressa* was listed, as a synonym of *Gomozia granadensis*, by Standley (1938) as occurring in Costa Rica; however, it does not occur in the Northern Hemisphere.

Nertera alsinoides Schltdl. & Cham., Linnaea 6: 413. 1831. Type: MEXICO: Questa Grande de Jalacingo, *Schiede & Deppe 1271* (Holotype presumably HAL, n.v.). —**Didymaea alsinoides** (Schltdl. & Cham.) Standl.

Nertera granadensis (Mutis ex L. f.) Druce, Rep. Bot. Soc. Exch. Club Brit. Isles 1916: 637. 1917. *Gomozia granadensis* Mutis ex L. f., Suppl. Pl. 129. 1781. Type: COLOMBIA: America meridionali, *Mutis s.n.* (LINN 172.1, n.v. (microfiche)).

Nonatelia Aubl., Hist. Pl. Guiane 1: 182, *pl. 70–75*. 1775. Type: Nonatelia racemosa Aubl. [Herein treated as a synonym of *Psychotria* L.]

Nonatelia officinalis Aubl, Hist. Pl. Guiane 1: 182, *tab. 70*. 1775. Type: FRENCH GUIANA: Cayenne, *Aublet s.n.* (Holotype presumably BM, n.v.).—**Psychotria officinalis** (Aubl.) Raeusch.

Nonatelia panamensis DC., Prodr. 4: 466. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Status uncertain**, probably **Psychotria racemosa** (Aubl.) Raeusch.

Nonatelia racemosa Aubl., Hist. Pl. Guiane 1: 187, *t. 72*. 1775. Type: FRENCH GUYANA: In sylvis territorii Orapu, *Aublet s.n.* (Holotype P, n.v.).—**Psychotria racemosa** Rich.

Nothophlebia Standl., Contr. U.S. Natl. Herb. 17: 438. 1914. Type: Nothophlebia costaricensis Standl. [Herein treated as a synonym of *Pentagonia* Benth.]

Nothophlebia costaricensis Standl., Contr. U.S. Natl. Herb. 17: 438. 1914. Type: COSTA RICA: Collines de Moin, littoral atlantique, Nov 1899, *H. Pittier 16024* (Holotype US 578472 (photos MEXU, PTBG)). —**Pentagonia costaricensis** (Standl.) W. C. Burger & C. M. Taylor

Oldenlandia L., Sp. Pl. 1: 119. 1753. Type: Oldenlandia corymbosa L. [Herein treated as a synonym of *Hedyotis* L.]

Oldenlandia acerosa (A. Gray) A. Gray, Pl. Wright. 2: 67. 1853. *Hedyotis acerosa* A. Gray, Pl. Wright. 1: 81. 1852. Type: U.S.A.: Texas, high prairies from Live Oak Creek to the Las Moras, Jun 1849, *C. Wright 237* (Holotype GH, n.v.; Isotype US). *Houstonia, Mallostoma*.—**Hedyotis acerosa** A. Gray

Oldenlandia angustifolia (Michx.) A. Gray, Pl. Wright. 2: 68. 1853. *Houstonia angustifolia* Michx., Fl. Bor. Amer. 1: 85. 1803. Type: U.S.A.: Florida in submaritimis, collector not cited (presumably P, n. v.).—**Hedyotis nigricans** (Lam.) Fosberg

Oldenlandia callitrichoides Griseb., Mem. Amer. Acad. Arts, n.s. 8: 506. 1863. Type: CUBA: Without precise locality, ad ripas rivulorum, *Wright 268* (Lectotype GOET, n.v.; designated by Terrell & Lewis, 1990). Syntype: CUBA: *Wright 1640* (GOET, n.v.). *Oldenlandiopsis*.—**Hedyotis callitrichoides** (Griseb) W. H. Lewis

Oldenlandia corymbosa L., Sp. Pl. 1: 119. 1753. Lectotype: "Oldenlandia," Plumier, Nov. Pl. Amer. *t. 36*. 1703; designated by Verdcourt (1976: 308).—**Hedyotis corymbosa** (L.) Lam.

Oldenlandia deppeana (Schltdl. & Cham.) DC., Prodr. 4: 428. 1830. *Gerontogea deppeana* Schltdl. & Cham., Linnaea 5: 169. 1830. Type: MEXICO: Veracruz, ad San Andrés, 1829, *Schiede & Deppe 391* (Holotype presumably HAL, n.v.; Isotype MO (photos MEXU, PTBG)). *Hedyotis*.—**Hedyotis microtheca** (Schltdl. & Cham.) Steud.

Oldenlandia depressa Sessé & Moç., Fl. Mexic. 27. 1893. Not *O. depressa* Willd. in L., 1798. Type: MEXICO: Habitat in montibus S. Augustine et viciniis. Floret Julio, *Sessé, Moçiño, Castillo & Maldonado 601* (Fl. Mex. Ic. 325) (Holotype presumably MA, n.v.; Isotype F, n.v.).—**Richardia tricocca** (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv.

Oldenlandia herbacea (L.) Roxb., Hort. Bengal. 11. 1814. *Hedyotis herbacea* L., Sp. Pl. 1: 102. 1753. Type: CEYLON: (Presumably LINN, n.v.).—**Hedyotis herbacea** L.

Oldenlandia humifusa (A. Gray) A. Gray, Smiths. Contr. Knowl. 5: 68. 1853. *Hedyotis humifusa* A. Gray, J. Boston Soc. Nat. Hist. 6: 216. 1850. Type: U.S.A.: Texas, near Fredericksburg, 1847, *F. Lindheimer 621* (Holotype GH, n.v.; Isotypes BM, n.v., MICH, n.v., MO, PH, n.v., US). *Houstonia*. —**Hedyotis humifusa** A. Gray

Oldenlandia lancifolia (Schumach.) DC., Prodr. 4: 425. 1830. *Hedyotis lancifolia* Schumach. in Schumach. & Thonn., Beskr. Guin. Pl. 72. 1827. Type: GHANA: Valley of Aquapim, *Thonning 210* (Lectotype C, n.v.; Isolectotype S, n.v.; designated by Verdcourt, 1976: 292). —**Hedyotis lancifolia** Schumach. in Schumach. & Thonn.

Oldenlandia latifolia M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 235. 1844. Type: MEXICO: Veracruz, Mirador, near Xalapa, 3000 ft., 1840, *H. Galeotti 2556* (Holotype BR, n.v.; Isotypes F (photos MEXU, PTBG), GH).—**Hedyotis exigula** W. H. Lewis

Oldenlandia microtheca (Schltdl. & Cham.) DC., Prodr. 4: 428. 1830. *Gerontogea microtheca* Schltdl. & Cham., Linnaea 5: 169. 1830. Type: MEXICO: Veracruz, Barranca de Tioselos in umbrosis, Sep, *Schiede & Deppe 390* (Holotype presumably HAL, n.v.; Isotype MO (photos MEXU, PTBG), label states In sylvis Papanatlae, Jan., Dec., corolla alba). —**Hedyotis microtheca** (Schltdl. & Cham.) Steud.

Oldenlandia ovata S. Watson, Proc. Amer. Acad. Arts 18: 97. 1883. Not *Hedyotis ovata* Thunb. ex Maxim., 1883. Type: MEXICO: Nuevo León, Guajuco, 27 miles SE of Monterrey, 1–8 Mar 1880, *E. Palmer 399* (Lectotype GH, n.v.; Isolectotype F (photos MEXU, PTBG), US (photo PTBG); designated by Terrell, 1978, in herb.). Syntype: MEXICO: *Ervandberg 200* (GH, n.v.).—**Hedyotis watsonii** W. H. Lewis

Oldenlandia pringlei B. L. Rob., Proc. Amer. Acad. Arts 27: 169. 1892. Type: MEXICO: San Luis Potosí, alkaline plaines, Hacienda de Angostura, 27 Jun 1891, *C. G. Pringle 3758* (Holotype GH, n.v.; Isotypes F, MO (photo PTBG), US (2 sheets; photos MEXU, PTBG)).—**Hedyotis pringlei** (B. L. Rob.) W. H. Lewis

Oldenlandia racemosa Sessé & Moç., Fl. Mexic. 28. 1893. Type: MEXICO: Habitat in Cordovae pratis. Floret Julio, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Oldenlandia repens L., Mant. 40. 1767. Type: INDIA: Without precise locality or collector (Lectotype LINN 155.2, n.v.; designated by Verdcourt, 1983).—**Dentella repens** (L.) J. R. & G. Forst.

Oldenlandia rubra (Cav.) A. Gray, Pl. Wright. 2: 68. 1853. *Houstonia rubra* Cav., Icon. 5: 48, *t. 474, fig. 1*. 1799. Type: MEXICO: Hidalgo, Ixmiquilpan, *Née s.n.* (Presumably MA, n.v.).—**Hedyotis rubra** (Cav.) A. Gray

Oldenlandia xestosperma B. L. Rob. & Greenm., Proc. Amer. Acad. Arts 32: 41. 1896. Type: MEXICO: Oaxaca, open glades, Sierra de San Felipe, 8000 ft., Jun 1894, *C. G. Pringle 4692* (Lectotype GH, n.v.; Isolectotypes BM, n.v., F, K, n.v., MO (photos MEXU, PTBG), MSC, n.v., PH, n.v., US (2 sheets; photos MEXU, PTBG), VT, n.v.; designated by Terrell, 1980). *Hedyotis, Houstonia*.—**Bouvardia xestosperma** (B. L. Rob. & Greenm.) Terrell & S. D. Koch

Oldenlandiopsis Terrell & W. H. Lewis, Brittonia 42: 185. 1990. Type: Oldenlandiopsis callitrichoides (Griseb.) Terell & W. H. Lewis. [Herein treated as a synonym of *Hedyotis* L.]

Oldenlandiopsis callitrichoides (Griseb.) Terrell & W. H. Lewis, Brittonia 42: 185. 1990. *Oldenlandia callitrichoides* Griseb., Mem. Amer. Acad. Arts, n.s. 8: 506. 1863. Type: CUBA: Ad ripas rivulorum, *C. Wright 268* (Lectotype GOET, n.v.; designated by Terrell & Lewis, 1990). Syntype: CUBA: *Wright 1640* (GOET, n.v.).—**Hedyotis callitrichoides** (Griseb.) W. H. Lewis

Omiltemia Standl., J. Wash. Acad. Sci. 8: 427. 1918. Type: Omiltemia longipes Standl.

Omiltemia filisepala (Standl.) C. V. Morton, Baileya 16: 98. 1968. *Kohleria filisepala* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 107. 1940. Type: MEXICO: Chiapas, Mt. Ovando, 16 Dec 1936, *E. Matuda 574* (Holotype F 916483 (photo PTBG); Isotypes MEXU, US).

Omiltemia floribunda (Standl.) J. H. Kirkbr., Syst. Bot. 9: 413. 1984. *Edithea floribunda* Standl., Trop. Woods. 34: 2. 1933. Not *Deppea floribunda* Hemsl., 1879. Type: MEXICO: Guerrero, Malinaltepec, Mar 1930, *L. Schultze 363* (Holotype B, destroyed (fragment F)).—**Deppea schultzei** Lorence

Omiltemia longipes Standl., J. Wash. Acad. Sci. 8: 427. 1918. Type: MEXICO: Guerrero, Omilteme, May 1903, *E. W. Nelson 7054* (Holotype US 1084692 (photos MEXU, PTBG); Isotypes GH, n.v., US).

Omiltemia scoti J. H. Kirkbr., Syst. Bot. 9: 411. 1984. Type: MEXICO: Puebla, above Teotitlán del Camino on road to Huautla de Jiménez, 2000–3250 m, 3 Aug 1961, *C. E. Smith, Jr., F. A. Peterson & N. Tejada 4137* (Holotype US 2645608; Isotype GH (photo PTBG)).—**Deppea scoti** (J. H. Kirkbr.) Lorence

Ophiorhiza L., Gen., ed. 5, 74. 1754. (=*Ophiorrhiza* L., 1753.)

Ophiorhiza lanceolata Forssk., F. Aegypt.-Arab. 42. 1775. Type: YEMEN: Hadie Mts., *Forsskål s.n.* (Holotype C, n.v.; Isotype BM, n.v.).—**Pentas lanceolata** (Forssk.) Deflers

Ophryococcus Oerst., Vidensk. Meddel. Dansk. Naturhist. Foren. Kjöbenhavn 1852: 52. 1853. Type: Ophryococcus gesnerioides Oerst. [Herein treated as a synonym of *Hoffmannia* Sw.]

Ophryococcus gesnerioides Oerst., Vidensk. Meddel. Dansk. Naturhist. Foren. Kjöbenhavn 1852: 53. 1853. Type: NICARAGUA:

Segovia, Pantasmo, Jan 1848, *Oersted 9332* [=*Plantae centroamericanae Oersted 9332*] (Holotype C, n.v. (photo F); Isotype F). —**Hoffmannia gesnerioides** (Oerst.) Kuntze

Oregandra Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 265. 1929; Trop. Woods 16: 22. 1928 (nomen nudum). Type: Oregandra panamensis Standl. [Herein treated as a synonym of *Chione* DC.]

Oregandra panamensis Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 265. 1929. Type: PANAMA: Talamanca Valley, 1927, *G. P. Cooper & G. M. Slater 144* (*Yale 10490*) (Holotype F 573817 (photo PTBG); Isotypes US 1316774 (photos MEXU, PTBG), US 1316777).—**Chione sylvicola** (Standl.) W. C. Burger

Osa Aiello, J. Arnold Arbor. 60: 115. 1979. Type: Osa pulchra (D. R. Simpson) Aiello

Osa pulchra (D. R. Simpson) Aiello, J. Arnold Arbor. 60: 116. 1979. *Hintonia pulchra* D. R. Simpson, Phytologia 29: 277. 1974. Type: COSTA RICA: Puntarenas, Osa Peninsula, about 5 km W. of Rincón de Osa, *W. Burger & R. Liesner 7320* (Holotype F 1729029 (photo PTBG); Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Otocalyx Brandegee, Univ. Calif. Publ. Bot. 6: 68. 1914. Type: Otocalyx chiapensis Brandegee [Herein treated as a synonym of *Rondeletia* L.]

Otocalyx chiapensis Brandegee, Univ. Calif. Publ. Bot. 6: 69. 1914. Not *Rondeletia chiapasensis* Standl., 1940. Type: MEXICO: Chiapas, Cerro del Boquerón, 1913, *C. A. Purpus 7041* (Holotype UC 173047 (photos MEXU, PTBG); Isotype GH, n.v.). —**Rondeletia brandegeana** Lorence.

Paederia L., Syst. Nat., ed. 12, 2: 189. 1767; Mant. Pl. 52. 1767. Type: Paederia foetida L.

Paederia ciliata (Bartl. ex DC.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 386. 1940. *Lygodysodea ciliata* Bartl. ex DC., Prodr. 4: 470. 1830. Type: MEXICO: Ad Acahuitzola, *Haenke s.n.* (presumably PR, n.v.; not located by Puff, 1991).

Paederia pringlei Greenm., Proc. Amer. Acad. Arts 39: 92. 1903. Type: MEXICO: Morelos, lava fields near Yautepec, 4500 ft., 27 Oct 1902, *C. G. Pringle 8682* (Holotype GH, n.v.; Isotypes MEXU, US (photos MEXU, PTBG)). —**Paederia ciliata** (Bartl. ex DC.) Standl.

Palicourea Aubl., Hist. Pl. Guiane 1: 172, *pl. 66.* 1775. Type: Palicourea guianensis Aubl.

Palicourea adusta Standl., J. Wash. Acad. Sci. 18: 279. 1928. Type: COSTA RICA: San José, Cerro de las Vueltas, 2700–3000 m, 29 Dec 1925–1 Jan 1926, *P. C. Standley & J. Valerio 43666* (Holotype US 1253350 (photo PTBG)).

Palicourea albocaerulea C. M. Taylor, Syst. Bot. Monogr. 26: 15, *fig. 3c, d.* 1989. Type: COSTA RICA: Puntarenas, Monteverde Cloud Forest Reserve, Pacific slope of Continental Trail, Nuboso Trail, 1540–1620 m, 16 Sep 1983, *Busby 107* (Holotype DUKE, n.v.).

Palicourea angustifolia Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 367. 1819. Type: VENEZUELA: Amazonas, banks of Orinoco and Río Negro, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotype B-WI, n.v. (photo MO)).

Palicourea austin-smithii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1333. 1938. Type: COSTA RICA: Alajuela, Cantón Alfaro Ruiz, Palmira, 2300 m, 4 Aug 1938, *A. Smith H1034* (Holotype F 942192 (photo PTBG); Isotypes F, GH, n.v., MO (photos MEXU, PTBG), US (photo PTBG)).—**Palicourea salicifolia** Standl.

Palicourea bella (Standl.) Dwyer, Ann. Missouri Bot. Gard. 67: 299. 1980. *Psychotria bella* Standl., J. Wash. Acad. Sci. 18: 185. 1928. Type: PANAMA: Chiriquí, between Alto de Las Palmas and Cerro de la Horqueta, 2100–2268 m, 18 Mar 1911, *H. Pittier 3250* (Holotype US 677646 (photo PTBG); Isotype F (photos MEXU, PTBG)).

Palicourea bellula C. M. Taylor, Syst. Bot. Monogr. 26: 24, *fig. 9, a, b, d.* 1989. Type:

COSTA RICA: Heredia, Río Vueltas, upper Río Patria, eastern slope of Volcán Barba at the Continental Divide, ca. 2000 m, 27 Jan 1970, *W. C. Burger & R. L. Liesner 7514* (Holotype F 1833197 (photo PTBG); Isotype MO (photo PTBG)).

Palicourea brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1333. 1938. Type: COSTA RICA: Palmira del Naranjo, in forest, 1850 m, Apr 1921, *Brenes 3512* (Holotype F 851630 (photo PTBG); Isotype GH, n.v.).

Palicourea caerulescens Suessenguth, Bot. Jahrb. Syst. 72: 286. 1942. Type: COSTA RICA: San José-Limón border region, Chirripó Grande, 3000 m, 30 Apr 1932, *Kupper 1200* (Holotype M, n.v.). —**Palicourea salicifolia** Standl.

Palicourea carpirostrata Dwyer, Ann. Missouri Bot. Gard. 67: 299. 1980. Type: PANAMA: Veraguas, NW of Santa Fé, 2 km from Escuela Agrícola Alto de Piedra. Cloud forest on ridge top below summit of Cerro Tute, 28 Mar 1975, *S. Mori & J. Kallunki 5262* (Holotype MO 2385000 (photo PTBG); Isotype MO 2384999 (photo PTBG)). —**Palicourea ochnoides** Dwyer

Palicourea chiriquina Standl., Contr. U.S. Natl. Herb. 18: 140. 1916. Type: PANAMA: Chiriquí, Cuesta de las Palmas, southern slope of Cerro de la Horqueta, 1700–2100 m, 17–19 Mar 1911, *H. Pittier 3211* (Holotype US 677607 (photo PTBG); Isotype US (photo PTBG)).

Palicourea copensis (Dwyer) C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 204. 1993. *Psychotria copensis* Dwyer, Ann. Missouri Bot. Gard. 67: 365. 1980. Type: PANAMA: Coclé, El Copé, El Potroso, Atlantic slope of Alto Calvario, 26 Feb 1977, *J. P. Folsom & R. Lantz 1880* (Holotype MO 2605731 (photos MEXU, PTBG)).

Palicourea costaricensis Benth. in Oerst., Vidensk. Medd. Dansk. Naturhist. Foren. Kjöbenhavn 1852: 38. 1853. Type: COSTA RICA: Heredia, Volcán de Barba et Cerros de Candelaria, *Oersted 11540* (Lectotype C, n.v. (photo F); Isolectotypes MICH, n.v., US, n.v.; designated by Standley, 1938).—**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Palicourea crocea (Sw.) Roem. & Schult., Syst. Veg. 5: 193. 1819. *Psychotria crocea* Sw., Prodr. Veg. Ind. Occ. 44: 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (Holotype BM, n.v.).

Palicourea dimorphandrioides (Dwyer) C. M. Taylor, Novon 6: 211. 1996. *Cephaëlis dimorphandrioides* Dwyer, Ann. Missouri Bot. Gard. 67: 66. 1980. Type: PANAMA: Veraguas, valley of Río Dos Bocas on road between Alto Piedras (above Santa Fé) and Calovébora, 350–400 m, 19 Aug 1974, *T. B. Croat 27470* (Holotype MO 2201358 (photos MEXU, PTBG)).

Palicourea discolor K. Krause, Bot. Jahrb. Engl. 54, Beibl. 119: 40. 1916. Type: COSTA RICA: Cañas Gordas, 1100 m, 18 Feb 1897, *H. Pittier 11161* (Holotype B, presumably destroyed (photos F, US), fragment F; Isotype US (photo PTBG)).

Palicourea domingensis (Jacq.) DC., Prodr. 4: 529. 1830. Psychotria domingensis Jacq., Enum. Pl. Carib. 16. 1760. Type: SANTO DOMINGO: Without precise locality, *Jacquin* (location unknown).—**Psychotria domingensis** Jacq.

Palicourea galeottiana M. Martens, Bull. Acad. Roy. Sci. Bruxelles 11: 136. 1844. Type: MEXICO: Oaxaca, *H. Galeotti 2602* (Lectotype BR (photos MEXU, PTBG); Isolectotypes K, n.v., P (photos MEXU, PTBG); designated by Taylor & Lorence, 1985: 669).—**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Palicourea garciae Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 195. 1940. Type: COLOMBIA: El Valle, San Antonio, W of Cali, near summit of Cordillera Occidental, 1900–2350 m, Feb–Mar 1939, *Killip & Garcia 33660* (Holotype F; Isotypes A, n.v., NY, n.v.).

Palicourea gardenioides (Scheidw.) Benth. & Hook. f. ex Hemsl., Biol. Centr.-Amer., Bot. 2: 52. 1881. *Rhodostoma gardenioides* Schiedw. in Otto & Dietr., Allgem. Gartenz.

10: 286. 1842. Type: Based on cultivated material of unknown origin, presumably from Veracruz, Mexico; type not designated. —**Psychotria gardenioides** (Scheidw.) Standl.

Palicourea gibbosa Dwyer, Ann. Missouri Bot. Gard. 67: 304. 1980. Type: PANAMA: Darién, Cerro Tacaracuna, West Ridge trail from summit camp to waterfall, E of camp, 1550–1700 m, 2 Feb 1975, *A. Gentry & S. Mori 14108* (Holotype MO 2354276; Isotype MO 2354275).

Palicourea gomezii C. M. Taylor, Ann. Missouri Bot. Gard. 77: 215. 1990. Type: COSTA RICA: Heredia, quebrada Sangrijuela, 700 m, *L. D. Gómez P., Chacón & Herrera 20896* (Holotype CR, n.v.; Isotype MO, n.v.).

Palicourea grandibracteata Dwyer, Ann. Missouri Bot. Gard. 67: 305. 1980. Type: PANAMA: Veraguas, NW of Santa Fé, 2 km from Escuela Agrícola Alto de Piedra, cloud forest on ridge top below summit of Cerro Tute, 28 Mar 1975, *S. Mori & J. Kallunki 5262* (Holotype MO 2384999 (photo PTBG); Isotype MO 2385000 (photo PTBG)). —**Palicourea ochnoides** Dwyer

Palicourea guianensis Aubl., Hist. Pl. Guiane 1: 173, *t. 66*. 1775. Type: FRENCH GUIANA: In Guajanae sylvis de Caux, *Aublet s.n.* (Holotype BM, n.v.).

Palicourea hammelii C. M. Taylor, Syst. Bot. Monogr. 26: 43, *fig. 22 c, d*. 1989. Type: PANAMA: Near top of Continental Divide ridge between Chiriquí and Bocas del Toro provinces near Cerro Pate Macho NE of Boquete, 7100 ft., 15 Mar 1982, *B. Hammel, W. J. Kress, S. Knapp, Trainer & Will 11408* (Holotype DUKE, n.v.; Isotype MO (photo PTBG)).

Palicourea intermedia Oerst. ex Pol., Linnaea 41: 571. 1877. Type: COSTA RICA: Forests of La Carpintera, *Polakowsky 143* (Holotype B, presumably destroyed (photo F); Isotype W, n.v. (fragment F)).—**Palicourea angustifolia** Kunth in Humb., Bonpl. & Kunth

Palicourea lanceolata Oerst. ex Pol., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 39. 1853. Type: COSTA RICA: San José, in monte Candelaria, 2100 m, 1845–48, *Oersted 11556* (Lectotype C, n.v. (photo & fragment F); designated by Standley (1938); see *Uragoga carpinterensis* O. Kuntze). —**Palicourea angustifolia** Kunth in Humb., Bonpl. & Kunth

Palicourea lancifera Standl. & L. O. Williams, Ceiba 1: 249. 1951. Type: COSTA RICA: Alajuela, Canton Alfaro Ruiz, Zarcero, 1500 m, 17 Jun 1941, *A. Smith 2794* (Holotype US 2215921 ex EAP (photo PTBG); Isotype F).

Palicourea lasiorrhachis Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 39. 1853. Type: COSTA RICA: In monte Candelaria, Feb 1847, *Oersted 11557* (Holotype C, n.v. (photos F, NY); Isotype US (photo PTBG)).

Palicourea leucantha Donn. Sm., Bot. Gaz. (Crawfordsville) 48: 295. 1909. Type: GUATEMALA: Alta Verapaz, between Cobán and Tactic, 1800 m, Mar 1903, *H. von Tuerckheim 8400* (Holotype US 943517 (photo PTBG); Isotype US (photo PTBG)).

Palicourea longibracteata Bartl. ex DC., Prodr. 4: 527. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Palicourea triphylla** DC.

Palicourea lusinaturalis Dwyer, Ann. Missouri Bot. Gard. 53: 106. 1966. Type: PANAMA: Colón, NW part of Canal Zone, area W of Limón Bay, Gatun Locks and Gatun Lake, Río Piña–Río Media divide, *Johnston 1807* (Holotype MO, not located 6/96). —**Psychotria luxurians** Rusby

Palicourea macrantha Loes., Verh. Bot. Vereins Brandenburg 65: 113. 1923. Type: GUATEMALA: Huehuetenango, Nenton District, near Yalambohoch, Aug 1896, *E. Seler & C. Seler 2871* (Holotype B, presumably destroyed (photos F, MO, NY, US); fragment F).

Palicourea macrocalyx Standl., J. Wash. Acad. Sci. 18: 278. 1928. Type: COSTA RICA: Heredia, Cerro de Las Lajas, north of San

Isidro, 2000–2200 m, 7 Mar 1926, *P. C. Standley & J. Valerio 51611* (Holotype US 1306801 (photo PTBG)).

Palicourea macrosepala K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 41. 1916. Type: COSTA RICA: Forêts de Alto del Pito (Ojo de Agua), près de San Marcos, 1000 m, Mar 1893, *A. Tonduz 7704* (Holotype B, presumably destroyed (photos F, MO, US; fragment F); Isotype BR, n.v.).—**Palicourea discolor** K. Krause

Palicourea mexicana Benth. in Oerst., Vid. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 37. 1853. Type: COSTA RICA: In monte Barba, *Oersted 11559* (Lectotype C, n.v.; designated by Standley (1938); see *Uragoga cordillerae* O. Kuntze).—**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Palicourea molliramis K. Schum. & K. Krause, Engl. Bot. Jahrb. 40: 337. 1908. Type: COLOMBIA: Cauca, prope La Junta ad Río d'Agua, 200–500 m, *Lehmann 4667* (Holotype B, presumably destroyed). *Psychotria*.—**Psychotria hebeclada** DC.

Palicourea montensis Dwyer, Ann. Missouri Bot. Gard. 67: 309. 1980. Type: PANAMA: Chiriquí, Bocas del Toro-Chiriquí border region, on Cerro Colorado copper mine road, 5000–5500 ft., 4 May 1975, *S. Mori & J. Kallunki 5880* (Holotype MO).—**Psychotria croceovenosa** Dwyer (which is based on the same type and represents the correct generic placement for this species.)

Palicourea montivaga Standl., J. Wash. Acad. Sci. 18: 279. 1928. Type: COSTA RICA: Heredia, Yerba Buena, northeast of San Isidro, 2000 m, 28 Feb 1926, *P. C. Standley & J. Valerio 49850* (Holotype US 1306225 (photo PTBG, fragment F)).

Palicourea nigrescens M. Martens & Galeotti, Bull. Acad. Roy. Soc. Sci. Bruxelles 11: 136. 1844. Not *Psychotria nigrescens* De Wild., 1924. Type: MEXICO: Veracruz, Cordillera, Xalapa, 4000 pieds, Jun–Oct 1840, *H. Galeotti 2653* (Holotype BR, n.v. (photo F); Isotype P (photos MEXU, PTBG)).—**Psychotria mexiae** Standl.

Palicourea ochnoides Dwyer, Ann. Missouri Bot. Gard. 67: 310. 1980. Type: PANAMA: Veraguas, trail up E side of Cerro Tute, to 1200 m, 25 Oct 1975, *J. T. Witherspoon, F. Witherspoon & R. Dressler 8872* (Holotype MO 2302202 (photo PTBG)).

Palicourea orosiana C. M. Taylor, Syst. Bot. Monogr. 26: 61, *fig. 33 a, b*. 1989. Type: COSTA RICA: Cartago, about 10 km south of Tapantí along new road on east slope above the Río Grande de Orosí, 1600 m, 14 & 17 Jul 1971, *W. C. Burger & M. Burger 7574* (Holotype F 1940946 (photo PTBG); Isotype MO (photo PTBG)).

Palicourea padifolia (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence, Taxon 34: 669. 1985. *Psychotria padifolia* Willd. ex Roem. & Schult., Syst. Veg. 5: 189. 1819. Type: MEXICO: Veracruz, Xalapa, *Humboldt & Bonpland 4420* (Holotype B-WI (photos DUKE, F, MO, NY)).

Palicourea panamensis Standl., Ann. Missouri Bot. Gard. 25: 839. 1938. Type: PANAMA: Chiriquí, Valley of upper Río Chiriquí Viejo, 1300–1900 m, Jul–Aug 1937, *G. White & P. White 14* (Holotype F 913062 (photo PTBG); Isotypes A, n.v., MO (photo PTBG)).—**Palicourea discolor** K. Krause

Palicourea parviflora Benth., Bot. Voy. Sulphur 107. 1845. Type: PANAMA: Island off the coast of Veraguas, *Barclay & Hinds s.n.* (Holotype BM, n.v.).—**Palicourea triphylla** DC.

Palicourea pauciflora Standl., J. Wash. Acad. Sci. 18: 278. 1928. Type: PANAMA: Chiriquí, between Alto de las Palmas and top of Cerro de la Horqueta, 2100–2265 m, 18 Mar 1911, *H. Pittier 3237* (Holotype US 677618 (photo PTBG); Isoytpe F (photo PTBG)).

Palicourea pendula C. M. Taylor, Syst. Bot. Monogr. 26: 68, *fig. 37 a–d*. 1989. Type: PANAMA: Veraguas, ridge of Cordillera de Tute, trail to Cerro Tute above Escuela Agrícola Alto de Piedra, just W of Santa Fé, 800–1350 m, 5 Jun 1982, *S. Knapp & R. Dressler 5409* (Holotype MO 3041797 (photo PTBG)).

Palicourea phanaerandra Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 252. 1947. Type: GUATEMALA: Izabal, Cerro San Gil, uppermost ridges and summit, 1200–1300 m, 26–27 Dec 1941, *J. A. Steyermark 41952* (Holotype F 1132612 (photo PTBG); Isotype US).—**Psychotria phanaerandra** (Standl. & Steyerm.) Lorence

Palicourea purpurea C. M. Taylor, Syst. Bot. Monogr. 26: 71, *fig. 33 c, d*. 1989. Type: PANAMA: Chiriquí, NW of Boquete along road to Palo Alto Arriba, from 2 km until road ends then another 0.5 km by trail, 1400–1600 m, 13 May 1984, *C. M. Taylor 3201* (Holotype DUKE, n.v.; Isotypes F (photo PTBG), MO (photo PTBG)).

Palicouraea purpusii Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 67. 1930. Type: MEXICO: Veracruz, Zacuapam [Zacuapan], shady forest, May 1928, *C. A. Purpus 10110* (Holotype F 602907 (photos MEXU, PTBG); Isotype MO (photos MEXU, PTBG)). —**Palicourea macrantha** Loes.

Palicourea rigidifolia (Dwyer & Hayden) Dwyer, Ann. Missouri Bot. Gard. 67: 313. 1980. *Cephaëlis rigidifolia* Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 37. 1968. Type: PANAMA: Panamá, Cerro Jefe, 2700 ft., 20 Aug 1967, *J. D. Dwyer 8075A* (Holotype MO 2165097 (photo PTBG)).—**Status uncertain**, probably **Psychotria** subg. **Heteropsychotria**

Palicourea salicifolia Standl., J. Wash. Acad. Sci. 18: 280. 1928. Type: COSTA RICA: San José, Laguna de La Chonta, northeast of Santa María de Dota, 2000–2100 m, 18 Dec 1925, *P. C. Standley 42174* (Holotype US 1252646 (photo PTBG)).

Palicourea seleri Loes., Verh. Bot. Vereins Prov. Brandenburg 65: 114. 1923. Type: GUATEMALA: Huehuetenango, zwischen Trinidad und Rosario, 13 Aug 1896, *E. Seler & C. Seler 3049* (Syntype B, destroyed (photos F, GH, MO, NY, US), fragment F, GH, n.v.); Yalambahoch, *E. Seler & C. Seler 2676* (Syntype B, destroyed).—**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Palicourea skotakii C. M. Taylor, Syst. Bot. Monogr. 26: 76, *fig. 41*. 1989. Type: COSTA RICA: San José, along a road to the S from the Panamerican Highway at km 67, about 1 km along the road, 2700–2800 m, 5 Mar 1985, *C. M. Taylor & C. Skotak 4756* (Holotype DUKE, n.v.; Isotypes F (photo PTBG), MO (photo PTBG)).

Palicourea spathacea C. M. Taylor, Syst. Bot. 9: 226. 1984. Type: COSTA RICA: Cartago, along the trail about 6 km beyond the gate to the meteorology station in Alto Patillos, Tapantí Hydroelectric Project, 7 Apr 1976, *J. Utley & K. Utley 4538* (Holotype DUKE, n.v.; Isotypes CAS, n.v., CR, n.v., F (photo PTBG), US (photo PTBG)).

Palicourea standleyana C. M. Taylor, Syst. Bot. Monogr. 26: 81, *fig. 45 d–f*. 1989. Nom. nov. for *Psychotria brenesii* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1347. 1938. Not *Palicourea brenesii* Standl., 1938. Type: COSTA RICA: Alajuela, Los Angeles de San Ramón (Cerros de La Balsa), Mar 1928, *Brenes 6050* (Holotype F 854521 (photos MEXU, PTBG)).

Palicourea stevensonii Standl., Trop. Woods. 16: 42. 1928. Type: BRITISH HONDURAS (BELIZE): Middlesex, Jul 1927, *N. S. Stevenson C* (Yale 10683) (Holotype F 572673; Isotype NY, n.v.).—**Psychotria capitata** Ruiz & Pav.

Palicourea subrubra Pol., Linnaea 41: 571. 1877. Type: COSTA RICA: San José, Cerro de La Carpintera, 24 Jun 1875, *Polakowsky 200A* (Holotype B, presumably destroyed (photo F)).—**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Palicourea talamancana Standl. & L. O. Williams, Ceiba 1: 250. 1951. Type: COSTA RICA: Cartago, Cordillera de Talamanca, near Vuelta Alta, Cerro de las Vueltas, 3200 m, 10 Apr 1949, *L. O. Williams 16264* (Holotype EAP, n.v.; Isotypes F (photo PTBG), GH, n.v., US (photo PTBG)).—**Palicourea brenesii** Standl.

Palicourea tilaranensis C. M. Taylor, Syst. Bot. Monogr. 26: 84, *fig. 3 a, b*. 1989. Type: COSTA RICA: Puntarenas-Alajuela border

region, in and around Monteverde Nature Reserve, mostly on Pacific watershed, 10°18'N, 84°47'N, 1450–1650 m, 29 Jun 1977, *R. O. Lawton 1189* (Holotype F 1885069 (photo PTBG)).

Palicourea triphylla DC., Prodr. 4: 526. 1830. Type: FRENCH GUIANA: Guiana Gallica, without precise locality, *Patris s.n.* (Holotype G-DC, n.v. (photo MO)). *Psychotria*.

Palicourea tubiflora Dwyer, Ann. Missouri Bot. Gard. 67: 316. 1980. Type: PANAMA: Panamá, Cerro Jefe, along trail on ridge running NE from summit, ca. 1000 m, 11 May 1975, *S. Mori & J. Kallunki 6082* (Holotype MO 2271726 (photo PTBG)).

Palicourea tumidonodosa Dwyer, Ann. Missouri Bot. Gard. 67: 317. 1980. Type: PANAMA: Panamá, Cerro Malí, base camp near Colombian border, lower montane wet forest, 1500 m, 22 Jan 1975, *A. Gentry & S. Mori 13787* (Holotype MO 2259310 (photo PTBG)).

Palicourea veraguensis Dwyer, Ann. Missouri Bot. Gard. 67: 318. 1980. Type: PANAMA: Chiriquí, Cerro Colorado, 50 km N of San Félix on the continental divide, 1200–1500 m, 17 Aug 1975, *S. Mori & R. Dressler 7796* (Holotype MO 2777356 (photo PTBG)). —**Palicourea lasiorrhachis** Oerst.

Palicourea vestita Standl., J. Wash. Acad. Sci. 18: 277. 1928. Type: COSTA RICA: San José, near Quebradillas, about 7 km north of Santa María de Dota, 1800 m, 24 Dec 1925, *P. C. Standley 42909* (Holotype US 1253015 (photos F, PTBG)).

Pavetta L., Sp. Pl. 1: 110. 1753. Type: Pavetta indica L.

Pavetta odoratissima Sessé & Moç., Fl. Mexic. 20. 1893; La Naturaleza, ser. 2, 2: app. 20. 1893. Type: MEXICO ?: Habitat in Praedio Sacarino de la Langosta, Equitis Gonzalo de Herrera, floret Agusto, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Pavetta racemosa Sessé & Moç., Fl. Mexic. 20. 1893; La Naturaleza, ser. 2, 2: app. 2, 18. 1893. Type: MEXICO: Without precise locality, *Sessé & Moçiño 543* (presumably MA, n.v.; probable Isotype F).—**Rondeletia villosa** Hemsl.

Pentagonia Benth., Bot. Voy. Sulphur *t. 39*. 1804; 105. 1845 (nom. cons.). Type: Pentagonia macrophylla Benth.

Pentagonia alba Dwyer, Ann. Missouri Bot. Gard. 67: 321. 1980. Type: PANAMA: Darién, Cerro Pirre, *Bristan 1224* (Holotype MO, not located 6/1996; Isotype NY, n.v.).

Pentagonia alfaroana (Standl.) Standl., J. Wash. Acad. Sci. 17: 171. 1927. *Watsonamra alfaroana* Standl., J. Wash. Acad. Sci. 15: 287. 1925. Type: COSTA RICA: Alajuela, vicinity of Capulín, on the Río Grande de Tárcoles, 80 m, 2 Apr 1924, *P. C. Standley 40194* (Holotype US 1152712 (photos MEXU, PTBG); Isotype F).—**Pentagonia tinajita** Seem.

Pentagonia brachyotis (Standl.) Standl., J. Wash. Acad. Sci. 17: 171. 1927. *Watsonamra brachyotis* Standl., Contr. U.S. Natl. Herb. 17: 443. 1914. Type: PANAMA: Darién, Marragantí, 3 Apr 1908, *R. S. Williams 999* (Holotype US 678351 (photos MEXU, PTBG)).

Pentagonia costaricensis (Standl.) W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 213. 1993. *Nothophlebia costaricensis* Standl., Contr. U.S. Natl. Herb. 17: 438. 1914. Type: COSTA RICA: Collines de Moin, littoral atlantique, Nov 1899, *H. Pittier 16024* (Holotype US 578472 (photos MEXU, PTBG)).

Pentagonia donnell-smithii (Standl.) Standl., J. Wash. Acad. Sci. 17: 170. 1927. *Watsonamra donnell-smithii* Standl., Contr. U.S. Natl. Herb. 17: 442. 1914. Type: COSTA RICA: La Emilia, Llanuras de Santa Clara, 250 m, Apr 1896, *J. D. Smith 6590* (Holotype US 355176 (photos MEXU, PTBG); Isotype F).

Pentagonia gymnopoda (Standl.) Standl., J. Wash. Acad. Sci. 17: 171. 1927. *Watsonamra gymnopoda* Standl., Contr. U.S. Natl. Herb. 17: 444. 1914. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre de Dios), 10–104 m, 8 Jul 1911, *H. Pittier 3858* (Holotype US 678935 (photos MEXU,

PTBG); Isotype US 678934 (photos MEXU, PTBG)).

Pentagonia hirsuta Standl., J. Wash. Acad. Sci. 18: 165. 1928. Type: COSTA RICA: Talamanca, forêts au-dessus de Tsâki, 500 m, Mar 1895, *A. Tonduz 9415* (Holotype US 938648 (photos MEXU, PTBG); Isotype F).

Pentagonia lobata C. M. Taylor, Novon 5: 202, *fig. 1D*. 1995. Type: COSTA RICA: Puntarenas. Cantón de Golfito, Reserva Natural de Vida Silvestre Golfito, final del camino hacia las torres, 8°39'52"N, 83°10'00"W, 7 Dec 1992, *B. Hammel 18619* (Holotype MO 4355639; Isotypes CR, n.v., F, n.v., MO 4355638).

Pentagonia macrophylla Benth., Bot. Voy. Sulphur 105, *tab. 39*. 1845. Type: PANAMA: Panamá, forests between Panama and Cruces, *Barclay s.n.* (Holotype BM, n.v.). *Watsonamra*.

Pentagonia nuciformis Dwyer, Ann. Missouri Bot. Gard. 67: 326. 1980. Type: PANAMA: Veraguas, 5 miles W of Santa Fé on the road past Escuela Agrícola Alto Piedra on Pacific side of divide, 800–1200 m, 18 Mar 1973, *T. B. Croat 23093* (Holotype MO 2161493 (photo PTBG)).

Pentagonia pinnatifida Seem., J. Bot. Hooker 7: 566. 1848. Type: PANAMA: Darién, banks of the river Cupica, *Seemann 1019* (Holotype BM, n.v. (photo MO)).

Pentagonia pittieri (Standl.) Standl., J. Wash. Acad. Sci. 17: 170. 1927. *Watsonamra pittieri* Standl., Contr. U.S. Natl. Herb. 17: 443. 1914. Type: PANAMA: San Blas, forests around Puerto Obaldía, San Blas coast, 0–50 m, Aug 1911, *H. Pittier 4298* (Holotype US 679414 (photos MEXU, PTBG); Isotype US 679415 (photos MEXU, PTBG)).—**Pentagonia pinnatifida** Seem.

Pentagonia pubescens (Standl.) Standl., J. Wash. Acad. Sci. 17: 171. 1927. *Watsonamra pubescens* Standl., Contr. U.S. Natl. Herb. 17: 441. 1914. Type: PANAMA: Canal Zone, around Tabernilla, along the railroad, 20–25 m, 6 Jul 1911, *H. Pittier 3822* (Holotype US 678894 (photo PTBG); Isotype NY, n.v.). —**Pentagonia macrophylla** Benth.

Pentagonia tinajita Seem., Bot. Voy. Herald 134, *t. 28*. 1854. Type: PANAMA: Veraguas, western parts, *Seemann 1595* (Holotype BM, n.v. (photo MO)).

Pentagonia veraguensis Dwyer, Ann. Missouri Bot. Gard. 67: 328. 1980. Type: PANAMA: Veraguas, Valley of Río Dos Bocas, 11 km from Escuela Agrícola Alto Piedra (above Santa Fé) on road to Calovébora, 450 m, 30 Aug 1974, *T. B. Croat 27504* (Holotype MO 2201425 (photo PTBG)).

Pentagonia wendlandii Hook. f., Bot. Mag. *pl. 5230*. 1861. Type: CENTRAL AMERICA [probably Costa Rica or Panama]: Described from cultivated material, type uncertain. *Watsonamra*.

Pentas, Benth. in Hook., Bot. Mag. 4086. 1844. Type: Pentas carnea Benth.

Pentas lanceolata (Forssk.) Deflers, Voy. Yemen 142. 1889. *Ophiorhiza lanceolata* Forssk., F. Aegypt.-Arab. 42. 1775. Type: AFRICA: Yemen, Hadie Mts., *Forsskål s.n.* (Holotype C, n.v.; Isotype BM, n.v.). Widely cultivated in Mexico and Mesoamerica.

Pentodon Hochst., Flora 27: 552. 1844. Type: Pentodon decumbens Hochst.

Pentodon pentandrus (Schumach. & Thonn.) Vatke, Osterr. Bot. Zeitschr. 25: 231. 1875. *Hedyotis pentandra* Schumach. & Thonn., Kongel. Danske Vidensk. Selsk. Naturvidensk., Math. Afh. 3: 71. 1827. Type: GUINEA: Aquapim, "S" [Haaslund Smith?] (location unknown). Naturalized at least in Mexico (Veracruz), Belize, Nicaragua, and Costa Rica.

Petesia P. Browne, Civ. Nat. Hist. Jamaica 143, *t. 2, 3*. 1756. Type not designated.

Petesia grandis Bartl. ex DC., Prodr. 4: 395. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 395.1)).—**Sommera grandis** (Bartl. ex DC.) Standl.

Petesia minor Griseb., Bonplandia 6: 8. 1858. Type: PANAMA: Without precise locality,

Seemann s.n. (Holotype presumably BM, n.v.).—**Sommera donnell-smithii** Standl.

Petesia repens Sessé & Moç., Fl. Mexic. 21. 1893. Type: MEXICO: Habitat in Ahualuci pratis, florit Octobris, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Petesia stipularis Sessé & Moç., Fl. Mexic. 21. 1893, La Naturaleza 2, 2: App. 2, 16. 1893. Not *Petesia stipularis* L., 1759. Type (listed twice): MEXICO: Habitat in Montibus Mazatlanensibus, floret Maio, habitat in Acahuitzotlae montibus, floret Julio, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain**, possibly **Chomelia** or **Sommera**. Protologue states leaves are prominently lineolate beneath and inflorescence is once dichotomous.

Pinarophyllon Brandegee, Univ. Calif. Publ. Bot. 6: 71. 1914. Type: Pinarophyllon flavum Brandegee

Pinarophyllon bullatum Standl., N. Amer. Fl. 32: 87. 1921. Type: GUATEMALA: Alta Verapaz, between Sepacuité and Secoyocté, 1100 m, 24 May 1905, *H. Pittier 348* (Holotype US 473013 (photos MEXU, PTBG, US)).

Pinarophyllon flavum Brandegee, Univ. Calif. Publ. Bot. 6: 71. 1914. Type: MEXICO: Chiapas, Finca Mexiquito, Jun 1913, *C. A. Purpus 6700* (Holotype UC 172447, n.v.; Isotypes F (photo PTBG), GH, n.v., US (photos MEXU, PTBG)).

Pittoniotis Griseb., Bonplandia 6: 8. 1858. Type: Pittoniotis trichantha Griseb.

Pittoniotis protracta (Bartl. ex DC.) Griseb., Bonplandia 6: 8. 1858. *Guettarda protracta* Bartl. ex DC., Prodr. 4: 457. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.). *Anisomeria*.—**Chomelia protracta** (Bartl. ex DC.) Standl.

Pittoniotis trichantha Griseb., Bonplandia 6: 8. 1858. Type: PANAMA: Without precise locality, *Duchassaing s.n.* (possibly P, n.v.). *Antirhea*.

Placocarpa Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 107. 1873. Type: Placocarpa mexicana Hook. f.

Placocarpa mexicana Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 108. 1873. Type: MEXICO: Veracruz, Orizaba, Apr 1855, *Botteri 913* (Lectotype P, (photo PTBG), here designated; Isolectotypes F (fragment), K (photo PTBG). Syntypes: MEXICO: Veracruz, Orizaba, *Botteri 316* (F, K (photo PTBG)); *Bourgeau 3022* (K (photo PTBG)). The sheet of *Botteri 913* at P, with duplicates in two other herbaria and copious flowers and fruits, represents the most appropriate choice for lectotype.

Plocaniophyllon Brandegee, Univ. Calif. Publ. Bot. 6: 69. 1914. Type: Plocaniophyllon flavum Brandegee

Plocaniophyllon flavum Brandegee, Univ. Calif. Publ. Bot. 6: 69. 1914. Type: MEXICO: Chiapas, Finca Mexiquito, Jun 1913, *C. A. Purpus 7019* (Holotype UC 173077, n.v.; Isotypes F (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Pogonopus Klotzsch, Monatsber. Königl. Preuss. Acad. Wiss. Berlin 1853: 500. 1853. Type: Pogonopus ottonis Klotzsch

Pogonopus exsertus (Oerst.) Oerst., Amér. Centr. 17. *t. 13*. 1863. *Macrocnemum exsertum* Oerst., Vidensk. Meddel. Naturhist. Foren Kjöbenhavn 1852: 45. 1853. Type: COSTA RICA: Jaris, *Oersted* (Holotype C, n.v.). Note: *Pogonopus speciosus* (Jacq.) K. Schum., a species from northern South America, was erroneously recorded from Central America by Standley & Williams (1975) and Dwyer (1980).

Portlandia P. Browne, Hist. Jamaica 164, *t. 11*. 1756. Type: Portlandia grandiflora L.

Portlandia ghiesbreghtiana Baill., Adansonia 12: 300. 1879. Type: MEXICO: Oaxaca, près de Hacienda de Huijastla au bord des ravine, 1842–3, *Ghiesbreght 27* (Holotype P (photos MEXU, PTBG); Isotypes F, P (3 sheets;

photos MEXU), US (photos MEXU, PTBG)). —**Coutaportla ghiesbreghtiana** (Baill.) Urb.

Portlandia guatemalensis Standl., J. Wash. Acad. Sci. 18: 162. 1928. Type: GUATEMALA: Alta Verapaz, Quebradas Secas, 2500 ft., 1 Jun 1920, *H. Johnson 282* (Holotype US 1081354 (photos MEXU, PTBG)).—**Coutaportla guatemalensis** (Standl.) Lorence

Portlandia hexandra Jacq., Enum. Pl. Carib. 16. 1760. Type: COLOMBIA: Bolívar, vicinity of Cartagena, *Jacquin* (location unknown). —**Coutarea hexandra** (Jacq.) K. Schum.

Portlandia lumaeana (Baill.) Baill., Hist. Pl. 7: 333. 1880. *Coutarea lumaeana* Baill., Adansonia 12: 301. 1879. Type: GUATEMALA: Côte occidentale des Andes, 450–500 m, 1878, *G. Luma s.n.* (Holotype P (photos MEXU, PTBG)).—**Hintonia lumaeana** (Baill.) Bullock

Portlandia mexicana (Zucc. & Mart.) Hemsl., Diagn. Pl. Nov. 31. 1879. *Coutarea mexicana* Zucc. & Mart. ex DC., Prodr. 4: 350. 1830. Type: MEXICO: Without precise locality, 1829, *Martius s.n.* (Holotype G-DC, n.v. (microfiche IDC 800.680. II.7).—**Nernstia mexicana** (DC.) Urb.

Portlandia pterosperma S. Watson, Proc. Amer. Acad. Arts 24: 52. 1889. Type: MEXICO: Sonora, Guaymas, 1887, *E. Palmer 298* (Holotype US 47978 (photos MEXU, PTBG); Isotype US 47979 (photos MEXU, PTBG)). *Coutarea*.—**Hintonia latiflora** (Sessé & Moç. ex DC.) Bullock

Portlandia speciosa (Aubl.) Baill., Hist. Pl. 7: 381. 1879. *Coutarea speciosa* Aubl., Hist. Pl. Guiane 1: 314, *t. 122*. 1775. Type: FRENCH GUIANA: *Aublet s.n.* (presumably P, n.v.). —**Coutarea hexandra** (Jacq.) K. Schum.

Posoqueria Aubl., Hist. Pl. Guiane 1: 133. 1775. Type: Posoqueria longiflora Aubl.

Posoqueria coriacea M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 240. 1844. Type: MEXICO: Oaxaca, Cordillère orientale, forêts humides de la Chinantla, près des bourgs indiens de Teotalcingo et Choapam, 2000–4000 ft., *H. Galeotti 1580* (Holotype BR, n.v.; Isotype P (photos F, MEXU, MO)).

Posoqueria grandiflora Standl., J. Wash. Acad. Sci. 18: 166. 1928. Type: COSTA RICA: Limón, wet thicket at Finca Hamburg on the Río Reventazón below El Cairo, 55 m, 19 Feb 1926, *P. C. Standley & J. Valerio 48706* (Holotype US 1305673 (photos MEXU, PTBG)).

Posoqueria latifolia (Rudge) Roem. & Schult., Syst. Veg. 5: 227. 1819. *Solena latifolia* Rudge, Pl. Guian. 1: 26. 1805; *t. 40*. 1806. Type: FRENCH GUIANA: *Martin s.n.* (BM, n.v.).

Posoqueria obliquinervia Standl., J. Wash. Acad. Sci. 18: 167. 1928. Type: COSTA RICA: Forêts et bords du Río Naranjo, 200–250 m, Mar 1893, *A. Tonduz 7528* [published erroneously as *9528*] (Holotype US 764158 (photos MEXU, PTBG)). —**Tocoyena pittieri** (Standl.) Standl.

Posoqueria panamensis (Walp. & Duchass.) Walp., Ann. Bot. Syst. 2: 797. 1852. *Stannia panamensis* Walp. & Duchass., Linnaea 23: 755. 1850. Type: PANAMA: Isthmo Panamensi, *Duchassaing* ? (location unknown).

Posoqueria pittieri Standl., J. Wash. Acad. Arts Sci. 18: 167. 1928. Type: PANAMA: Canal Zone, near Hydrographic Station on Trinidad River, 17 May 1914, *H. Pittier 6635* (Holotype US 716697 (photos MEXU, PTBG); Isotype P, n.v. (fragment F)). —**Tocoyena pittieri** (Standl.) Standl.

Psychotria L., Syst. Nat., ed. 10, 2: 929, 1122, 1364. 1759. Nom. cons. Type: Psychotria asiatica L.

Psychotria acicularis C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 231. 1993. Type: COSTA RICA: Puntarenas, Rincón de Osa, region to southwest of airstrip, 20–60 m, 20 Jul 1974, *J. Utley & K. Utley 1036* (Holotype CR, n.v.; Isotypes F, n.v., MO).

Psychotria acuminata Benth., Bot. Voy. Sulphur 107. 1845. Type: COLOMBIA: Isle

of Gorgona, and Colombian coast, *Barclay s.n.* (Holotype BM, n.v.).

Psychotria acuminata Benth. subsp. *boraginoides* Dwyer, Ann. Missouri Bot. Gard. 67: 344. 1980. Type: PANAMA: Panamá, El Llano Cartí-Tupile road, 12 mi. above Panamerican Highway, 26–27 Mar 1973, *R. L. Liesner 1187* (Holotype MO 2164366).—**Psychotria acuminata** Benth.

Psychotria aggregata Standl., Contr. U.S. Natl. Herb. 18: 128. 1916. Type: PANAMA: Chiriquí, between Alto de las Palmas and Cerro de la Horqueta, 2100–2268 m, 18 March 1911, *H. Pittier 3264* (Holotype US 677655 (photos MEXU, PTBG)).

Psychotria aguilarii Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 23. 1943. Type: GUATEMALA: Chimaltenango, on road between Chimaltenango and San Martín Jilotepeque, 1500–1700 m, 22 Dec 1940, *P. C. Standley 80900* (Holotype F 1092416 (photos MEXU, PTBG)).

Psychotria alba Ruiz & Pav. var. *mexicana* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 12. 1853. Syntypes: MEXICO: South Mexico, Jecaltepec, *F. Liebmann 17* (presumably C, n.v.); Cazadera, *F. Liebmann 18* (presumably C, n.v.); Pital, *F. Liebmann 23* (presumably C, n.v.).—**Status uncertain.**

Psychotria albonervia Standl., Contr. U.S. Natl. Herb. 18: 131. 1916. Type: PANAMA: Chagres, Isthmus of Panama, Feb–Mar 1850, *Fendler 62* (Holotype US 47282 (photos MEXU, PTBG); Isotype MO).—**Psychotria capitata** Ruiz & Pav.

Psychotria alboviridula K. Krause, Notizbl. Königl. Bot. Gard. Berlin 6: 208. 1914. Type: BRAZIL: Im Gebiet des Alto Acre, Seringal, São Francisco, Sep 1911, *Ule 9846* (Holotype B, presumably destroyed (photo F, fragment F); Isotype US).—**Psychotria remota** Benth.

Psychotria alfaroana Standl., J. Wash. Acad. Sci. 18: 273. 1928. Type: COSTA RICA: Guanacaste, El Arenal, 485–600 m, 18–19 Jan 1926, *P. C. Standley & J. Valerio 45179* (Holotype US 1253966 (photos MEXU, PTBG)).

Psychotria allenii Standl., Ann. Missouri Bot. Gard. 27: 342. 1940. Type: PANAMA: Coclé, vicinity of El Valle, 600–1000 m, 8 Dec 1938, *P. H. Allen 1796* (Holotype F 989006 (photos MEXU, PTBG); Isotypes GH, n.v., NY, n. v., US (photos MEXU, PTBG)).

Psychotria altorum Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 86. 1944. Type: GUATEMALA: Quezaltenango, Montaña Chicharro, on lower southeast-facing slopes of Volcán Santa María, 2–4 miles south of Santa María de Jesús, 1400–1500 m, 17 Jan 1940, *J. A. Steyermark 34302* (Holotype F 1056806 (photos MEXU, PTBG)).—**Psychotria costivenia** Griseb. var. **altorum** (Standl. & Steyerm.) C. W. Ham.

Psychotria americana Sessé & Moç., Fl. Mexic., ed. 2, 57. 1894. Type: MEXICO: Habitat in montibus calidarum regionum, ut Tenampulco prope Huastecam et Acauizotla versus Acapulcum, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Psychotria angustiflora K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 43. 1916. Type: COSTA RICA: Sur les collines autour de Las Vueltas, Tucurrique, 600–700 m, Jan 1899, *A. Tonduz 12996* (Holotype B, presumably destroyed (photos F, MO); Isotypes P (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Psychotria anomothyrsa K. Schum. & Donn. Sm., Bot. Gaz. (Crawfordsville) 35: 3. 1903. Type: GUATEMALA: Alta Verapaz, Cubliquitz, 350 m, Dec 1900, *H. von Tuerckheim 7909* (Holotype US 943471 (photos MEXU, PTBG); Isotypes GH, n.v., US (photos MEXU, PTBG)).—**Psychotria macrophylla** Ruiz & Pav.

Psychotria arborea Sessé & Moç., Fl. Mexic., ed. 2, 57. 1894. Type: MEXICO: Habitat in Ahualuci atque calidis Guatemalae montibus. Floret Maio, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Psychotria aubletiana Steyerm., Mem. New York Bot. Gard. 23: 694. 1972. *Cephaëlis axillaris* Sw., Prodr. 45. 1788. Not *Psychotria axillaris* Willd., 1798, nor Vell., 1827. Type: WEST INDIES: St. Christopher, *Swartz s.n.* (Holotype presumably S, n.v.).

Psychotria aubletiana Steyerm. var. *centro-americana* Steyerm., Mem. New York Bot. Gard. 23: 694. 1972. Type: HONDURAS: Morazán, La Tigra, entre El Piliguin y Prado de Fatima, 1800 m, 30 Dic 1962, *A. Molina R. 11237* (Holotype NY, n.v.; Isotype F (photos MEXU, PTBG)).—**Psychotria aubletiana** Steyerm.

Psychotria aurantibractea C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n. s. 33: 235. 1993. *Cephaëlis pittieri* K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 45. 1916. Not *Psychotria pittieri* Standl., 1916. Type: COSTA RICA: Puntarenas, Cañas Gordas, 1100 m, Feb 1897, *H. Pittier 11162* (Holotype B, destroyed (photos F, MO, fragment F); Isotype US (photos MEXU, PTBG)).

Psychotria aureola Bartl. ex DC., Prodr. 4: 513. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Status uncertain**, probably **Psychotria hebeclada** DC. or **P. pubescens** Sw.

Psychotria bakeri Dwyer, Ann. Missouri Bot. Gard. 67: 347. 1980. Type: PANAMA: Chiriquí, Los Santos, Loma Prieta, Cerro Grande, 2400–2800 ft., 8 Jun 1967, *W. H. Lewis, R. K. Baker, B. MacBryde & R. L. Oliver 2249* (Holotype MO 2219527 (photos MEXU, PTBG); Isotypes F, GH, n.v.).

Psychotria balancanensis C. W. Ham., Phytologia 64: 219. 1988. Type: MEXICO: Tabasco, Balancán, La Palma, 1–6 Jul 1939, *E. Matuda 3286* (Holotype F 1026360 (photo PTBG); Isotypes A, n.v., MEXU, NY, n.v.).

Psychotria barbiflora DC., Prodr. 4: 509. 1830. Type: BRAZIL: Bahia, *Salzmann 1* (Holotype G-DC, n.v. (photo MO)). According to Steyermark (1972) this species occurs in Central America, where it has been called *Psychotria involucrata* of authors, not Sw.

Psychotria bella Standl., J. Wash. Acad. Sci. 18: 185. 1928. Type: PANAMA: Chiriquí, between Alto de las Palmas and Cerro Horqueta, 2100–2268 m, 18 Mar 1911, *H. Pittier 3250* (Holotype US 677646 (photo PTBG); Isotype F (photos MEXU, PTBG)).—**Palicourea bella** (Standl.) Dwyer

Psychotria berteriana DC., Prodr. 4: 515. 1830. Type: SANTO DOMINGO: Dominique, without precise locality, *Bertero s.n.* (a specimen at G-DC, n.v. (photo MO) likely represents authentic material).

Psychotria berteriana DC. subsp. *luxurians* (Rusby) Steyerm., Mem. New York Bot. Gard. 3: 534. 1972. Type: BOLIVIA: Between Tipuani and Guanai, Dec 1892, *Bang 1741* (Holotype US, n.v.).—**Psychotria luxurians** Rusby

Psychotria biaristata Bartl. ex DC., Prodr. 4: 513. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Psychotria graciliflora** Benth. ex Oerst.

Psychotria bimea L. Riley, Kew Bull. 1927: 124. 1927. Type: PANAMA: Between Panama & Sabanas, 14 Jun 1924, *L. A. M. Riley 112* (Holotype K, n.v.; Isotypes MO (2 sheets; photos MEXU, PTBG), US (photo PTBG)).—**Psychotria horizontalis** Sw.

Psychotria boquetensis Dwyer, Ann. Missouri Bot. Gard. 67: 349. 1980. Type: PANAMA: Chiriquí, Boquete, 3800 ft., 25 May 1938, *M. E. Davidson 709* (Holotype MO 1172505 (photos MEXU, PTBG); Isotypes F, US).

Psychotria borucana (A. R. Molina) C. M. Taylor & W. C. Burger, Fieldiana: Bot., n.s. 33: 236. 1993. *Cephaëlis borucana* A. R. Molina, Ceiba 4: 31. 1951. Based on *Cephaëlis affinis* Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 184. 1930, not *P. affinis* Baker, 1877. Type: COSTA RICA: Puntarenas, forest near Esquinas Experimental Station, area between Río Esquinas and Río Palmar Sur de Osa, 200 ft., 22 May 1950, *P. H. Allen 5540* (Holotype US 2215926 ex EAP (photos MEXU, PTBG); Isotype US 2828131 (photos MEXU, PTBG)). Note: A. R. Molina annotated as "typo" the sheet US 2215926 and as "isotype" US 2828131.

Psychotria brachiata Sw., Prodr. Veg. Ind. Occ. 45. 1788. Type: JAMAICA: *Swartz s.n.* (presumably S, n.v.).

Psychotria brachybotrya Müll. Arg. in Mart., Fl. Brasil. 6(5): 327. 1881. Syntypes: BRAZIL: Amazonas, habitat in regione Rio Negro prope S. Gabriel, *Spruce 2190* (B, presumably destroyed), *Martius s.n.* (B, presumably destroyed).

Psychotria bracteolata M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 228. 1844. Type: MEXICO: Oaxaca, Sierra de Calpulalpan, 5000–7000 ft., *H. Galeotti 7226* (Holotype presumably BR, n.v.; Isotypes K, n.v., P (photos MEXU, MO, PTBG)).—**Psychotria hebeclada** DC.

Psychotria breedlovei Lorence, Novon 4: 125, *fig. 4*. 1994. Type: MEXICO: Chiapas, Mun. La Trinitaria, a 1 km al E de Tziscao ó a 11 km al E de la entrada al Parque Nacional Lagos de Montebello, 16°05'N, 91°39'O, 1330 m, 9 Ago 1985, *T. Chehaibar 170* (Holotype PTBG 9595; Isotypes MEXU, UAMIZ).

Psychotria brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1347. 1938. Type: COSTA RICA: Los Angeles de San Ramón, Cerros de La Balsa, 16 Mar 1928, *A. M. Brenes 6050* (Holotype F 854521 (photos MEXU, PTBG)).—**Palicourea standleyana** C. M. Taylor

Psychotria burgeri C. M. Taylor, Novon 5: 204, *fig. 1B*. 1995. Type: COSTA RICA: Puntarenas, Cantón de Puntarenas, Monteverde, along Quebrada Máquina, 10°18'N, 84°48'W, 12 Mar 1990, *W. Haber 9778* (Holotype CR, n.v.; Isotypes F, n.v., MO 4619858, US, n.v.).

Psychotria caerulea Ruiz & Pav., Fl. Peruv. 2: 62. *pl. 213, fig. b*. 1799. Type: PERU: Andes of Peru, Huánuco, ad Vitoc, *Ruiz López & Pavón s.n.* (Holotype presumably MA, n.v.). Note: this species occurs in Panama according to Steyermark (1972).

Psychotria calimensis Standl. ex Steyerm., Acta Biol. Venez. 4: 96. 1964. Type: COLOMBIA: El Valle, *Cuatrecasas 16298* (Holotype F, n.v.; Isotypes US, n.v., VEN, n.v.).

Psychotria calochlamys Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 199. 1930. Type: PERU: Loreto, *Williams 1226* (Holotype F, n.v.).

Psychotria calophylla Standl., Contr. U.S. Natl. Herb. 18: 129. 1916. Type: PANAMA: Chagres, Isthmus of Panama, 15 Mar 1830, *A. Fendler 60* (Holotype US 48568 (photos MEXU, PTBG); Isotypes GH (photo PTBG), MO (photo PTBG)).

Psychotria calopogon L. O. Williams, Phytologia 28: 227. 1974. Type: GUATEMALA: Huehuetenango, between Ixcan and Río Ixcan, Sierra de los Cuchumatanes, 150–200 m, 23 Jul 1942, *J. A. Steyermark 49308* (Holotype F 1133859 (photos MEXU, PTBG)).

Psychotria camponutans (Dwyer & Hayden) Hammel, Selbyana 12: 139. 1991. *Cephaëlis camponutans* Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 35. 1968. Type: PANAMA: Panamá, Cerro Jefe, *Dwyer & Gauger 7346* (Holotype MO (not located 6/1996)).

Psychotria capacifolia Dwyer, Ann. Missouri Bot. Gard. 67: 353. 1980. Type: PANAMA: Bocas del Toro, above Quebrada Huron on Cerro Bonyik, 500–1200 ft., 13 Apr 1968, *J. Kirkbride, Jr. & J. Duke 601* (Holotype MO 2623364 (photos MEXU, PTBG)).

Psychotria capitata Ruiz & Pav., Fl. Peruv. 2: 59, *pl. 206, fig. a*. 1799. Type: PERU: Huánuco, Chinchao, *Ruiz López & Pavón s.n.* (presumably MA, n.v.; for typification see Steyermark, 1972: 618).

Psychotria capitata Ruiz & Pav. subsp. *fissistipularis* Dwyer, Ann. Missouri Bot. Gard. 67: 355. 1980. Type: PANAMA: Colón, Miguel de la Borda, edge of forest near beach, *T. B. Croat 10037* (Holotype MO 2050309).—**Psychotria capitata** Ruiz & Pav.

Psychotria capitata Ruiz & Pav. subsp. *rubra* Dwyer, Ann. Missouri Bot. Gard. 67: 356. 1980. Type: PANAMA: Panamá, El Llano to Cartí road, 8 km N of Panamerican Highway, 6 Apr 1977, *J. P. Folsom & L. Skog 2454* (Holotype MO 2606808 (photos MEXU, PTBG)).—**Psychotria capitata** Ruiz & Pav.

Psychotria carnosocarpa Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 41. 1968. Type:

PANAMA: Chiriquí, Francés Arriba School, ca. 14 miles N of David, 1200 ft., 14 Dec 1966, *W. H. Lewis, D. Burch, J. D. Dwyer, T. S. Elias, N. Escobar, R. L. Oliver & K. R. Robertson 964* (Holotype MO 1966154 (photos MEXU, PTBG)).

Psychotria cartagoensis Nepokroeff in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 239. 1993. Nom. nov. for *Cephaëlis latistipula* Standl., J. Wash. Acad. Sci. 18: 281. 1928, not *Psychotria latistipula* Benth. in Hook., 1849. Type: COSTA RICA: Cartago, vicinity of Orosí, 30 Mar 1924, *P. C. Standley 39695* (Holotype US 1153168 (photos MEXU, PTBG)).

Psychotria carthaginensis Jacq., Enum. Syst. Pl. Carib. 16. 1760. Type: COLOMBIA: Bolívar, vicinity of Cartagena, *Jacquin s.n.* (location unknown). *Uragoga.*

Psychotria cascajalensis C. W. Ham., Phytologia 64: 220. 1988. Type: PANAMA: Coclé, N of Penonomé, between Llano Grande and Cascajal, rd. to Coclesito, 480 m, 2 May 1979, *B. Hammel 7227* (Holotype MO 2901097; Isotypes ENCB, n.v., MO).

Psychotria catillicalyx Dwyer, Ann. Missouri Bot. Gard. 67: 358. 1980. Type: PANAMA: Veraguas, Valley of Río Dos Bocas, 11 km from Escuela Agrícola Alto Piedra on road to Calovébora, 450 m, 30 Aug 1974, *T. B. Croat 27548* (Holotype MO 2272494).—**Psychotria panamensis** Standl. var. **panamensis**

Psychotria cerroazulensis Dwyer, Ann. Missouri Bot. Gard. 53: 107. 1966. Type: PANAMA: Panamá, Cerro Azul, Goofy Lake area, 600 m, 1 Sep 1963, *J. D. Dwyer 2875* (Holotype MO 1800011 (photo PTBG)). —**Psychotria calophylla** Standl.

Psychotria chagrensis Standl., J. Wash. Acad. Sci. 15: 105. 1925. Type: PANAMA: Canal Zone, Barro Colorado Island, Gatún Lake, 17 Jan 1924, *P. C. Standley 31373* (Holotype US 1215962 (photos MEXU, PTBG)).

Psychotria chamissoana (Loes.) Standl., J. Wash. Acad. Sci. 17: 341. 1927. *Mapouria chamissoana* Loes., Verh. Bot. Ver. Brandenburg 65: 112. 1923. Type: MEXICO: Veracruz, Tecolute [Tecolutla], Jan, *Schiede 1266* (Holotype B, presumably destroyed (photos F, MO)).—**Psychotria erythrocarpa** Schltdl.

Psychotria chiapensis Standl., Contr. U.S. Natl. Herb. 23: 1390. 1926. Based on *Cephaëlis tetragona* Donn. Sm., Bot. Gaz. (Crawfordsville) 61: 376. 1916, not *Psychotria tetragona* Seem., 1867. Type: MEXICO: Chiapas, Finca Mexiquito, Jul 1913, *C. A. Purpus 6963* (Holotype US 567237 (photos MEXU, PTBG); Isotype GH, n.v.). *Cephaelis, Evea.*

Psychotria chiriquiensis (Standl.) C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n. s. 33: 241. 1993. *Cephaëlis chiriquiensis* Standl., Ann. Missouri Bot. Gard. 28: 469. 1941. Type: PANAMA: Chiriquí, Bajo Chorro, 1900 m, 20–22 Jul 1940, *R. E. Woodson, Jr. & R. W. Schery 610* (Holotype MO 1209028 (photos MEXU, PTBG); Isotypes F, GH, n.v.).

Psychotria chiriquina Standl., Contr. U.S. Natl. Herb. 18: 129. 1916. Type: PANAMA: Chiriquí, Alto de la Cuesta, around Camp Aguacatal, eastern slope of Chiriquí Volcano, 2100–2200 m, 10–13 Mar 1911, *H. Pittier 3118* (Holotype US 677509 (photos MEXU, PTBG); Isotype F).

Psychotria chitariana Dwyer & C. W. Ham., Phytologia 64: 221. 1988. Type: COSTA RICA: Cartago, 13 km E of Turrialba on the highway to Limón; canyon of Río Chitaría, 750–800 m, 10 May 1983, *R. Liesner, E. Judciewicz & B. Pérez G. 15400* (Holotype MO 3235522 (photo PTBG); Isotype CR, n.v.).

Psychotria chlorobotrya Standl., J. Wash. Acad. Arts 16: 17. 1926. Type: MEXICO: Chiapas, damp forest, mountains near Fenix, May 1925, *C. A. Purpus 104* (Holotype US 1208242 (photos MEXU, PTBG)).

Psychotria chlorotica Müll. Arg., Flora 59: 545. 1876. Type: BRAZIL: Bahia, *Blanchet 908* (Lectotype presumably G, n.v.; designated by Dwyer, 1980: 362).

Psychotria chrysocalymma L. O. Williams, Phytologia 28: 228. 1974. Type: GUATEMALA: El Progreso, hills north of

Finca Piamonte, between Finca Piamonte and summit of Volcán Santa Luisa, 2400–3333 m, 5 Feb 1942, *J. A. Steyermark 43518* (Holotype F 1133849 (photos MEXU, PTBG)).—**Psychotria purpusii** Standl.

Psychotria cincta Standl., Publ. Field Columbian Mus. Nat. Hist., Bot. Ser. 7: 90. 1930. Type: COLOMBIA: El Valle, Córdoba, Dagua Valley, 6–8 May 1922, *E. P. Killip 5140* (Holotype US 1141369 (photo PTBG) Isotype G, n.v.).

Psychotria clivorum Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 87. 1944. Based on *Psychotria limonensis* var. *angustifolia* Standl., not *Psychotria angustifolia* Poir. in Lam., 1804. Type: GUATEMALA: Suchitepéquez, Finca Moca, 3400 ft., 7 Jan 1935, *A. F. Skutch 2073* (Holotype F 934091 (photos MEXU, PTBG); Isotype A, n.v.).

Psychotria cocosensis C. W. Ham., Phytologia 64: 222. 1988. Type: COSTA RICA: Cocos Island, 18 Jun 1898, *H. Pittier 12375* (Holotype US, n.v.).

Psychotria compressicaulis K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 44. 1916. Type: COSTA RICA: Forêts de Tuis, 600 m, Jul 1898, *H. Pittier 12412* (Holotype B, presumably destroyed; Isotype US (photos MEXU, PTBG)).—**Psychotria panamensis** Standl. var. **compressicaulis** (K. Schum.) C. W. Ham.

Psychotria concolor Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 31. 1853. Type: NICARAGUA: Volcán de Mombacho, *Oersted s.n.* (Holotype presumably K, n.v.).—**Status uncertain.**

Psychotria cooperi Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 4: 296. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp on Chiriquí trail, 1250 ft., Jan–Mar 1928, *P. Cooper 577* (Holotype F 579633 (photos MEXU, PTBG); Isotype NY, n.v.).

Psychotria copensis Dwyer, Ann. Missouri Bot. Gard. 67: 365. 1980. Type: PANAMA: Coclé, El Copé, El Potroso, Atlantic slope of Alto Calvario, 26 Feb 1977, *J. P. Folsom & R. Lantz 1880* (Holotype MO 2605731 (photos MEXU, PTBG)).—**Palicourea copensis** (Dwyer) C. M. Taylor

Psychotria copeyana Standl. & L. O. Williams, Ceiba 1: 251. 1951. Type: COSTA RICA: Cartago, near El Copey, Cordillera de Talamanca, 1800 m, 23 Apr 1949, *L. O. Williams & P. H. Allen 16482* (Holotype F 1388092 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Palicourea garciae** Standl.

Psychotria cornifolia Humb. & Bonpl. ex Roem. & Schult., Syst. Veg. 5: 191. 1819. Type: VENEZUELA: Near Maypures, on the Orinoco, *Humboldt & Bonpland 893* (Holotype P-Bonpland, n.v.; Isotype B, presumably destroyed (photo MO)).—**Rudgea cornifolia** (Humb. & Bonpl.) Standl.

Psychotria correae (Dwyer & Hayden) C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 244. 1993. *Cephaëlis correae* Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 36. 1968. Type: PANAMA: Coclé, mountains N of El Valle de Antón, 2500–3000 ft., 28 May 1967, *W. H. Lewis, B. McBryde, R. L. Oliver & J. E. Ridgway 1759* (Holotype MO 1887361 (photos MEXU, PTBG); Isotypes GH, n.v., UC, n.v., US, n.v.).

Psychotria costaricensis Pol., Linnaea 41: 571. 1877. Type: COSTA RICA: Angostura, Nov 1875, *H. Polakowsky 384A* (Holotype B, presumably destroyed)).—**Psychotria pilosa** Ruiz & Pav.

Psychotria costivenia Griseb., Plantae Wrightianae e Cuba Orientale, pars II: 508. 1862; Mem. Am. Acad. Arts, n.s. 8: 508. 1863. var. **costivenia**. Type: CUBA: Cuba Orientali, prope Monte Verde, Jan–Jul 1859, *Wright 242* (Lectotype GH, n.v.; Isolectotype BR, n.v.; designated by Hamilton, 1989). *Uragoga*.

Psychotria costivenia Griseb. var. **altorum** (Standl. & Steyerm.) C. W. Ham., Phytologia 64: 223. 1988. *Psychotria altorum* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 86. 1944. Type: GUATEMALA: Quezaltenango, Montaña Chicharro, on lower southeast-facing slopes of Volcán Santa

María, 2–4 miles south of Santa María de Jesús, 1400–1500 m, 17 Jan 1940, *J. A. Steyermark 34302* (Holotype F 1056806 (photos MEXU, PTBG)).

Psychotria crebrinervia Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 4: 343. 1929. Type: HONDURAS: Atlántida, Lancetilla valley, near Tela, 20–600 m, 6 Dec 1927–20 Mar 1928, *P. C. Standley 55286* (Holotype F 584201 (photos MEXU, PTBG)). —**Psychotria berteriana** DC.

Psychotria crocea Sw., Prodr. Veg. Ind. Occ. 44. 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (Holotype BM, n.v.). *Uragoga*.—**Palicourea crocea** (Sw.) Roem. & Schult.

Psychotria croceovenosa Dwyer, Ann. Missouri Bot. Gard. 67: 367. 1980. Type: PANAMA: Chiriquí, N of San Félix at Chiriquí–Bocas del Toro border on Cerro Colorado copper mine road along continental divide, 5000–5500 ft., 4 May 1975, *S. Mori & J. Kallunki 5880* (Holotype MO 2579259 (photos MEXU, PTBG)). Based on the same type as *Palicourea montensis* Dwyer, 1980, which represents incorrect generic placement for this species.

Psychotria cuneifolia Sessé & Moç., Fl. Mexic., ed. 2, 58. 1894. Not *P. cuneifolia* DC., 1830. Type: MEXICO: Habitat in Cordovae vicinis montibus, floret Augusto, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Psychotria cuspidata Bredem. ex Roem. & Schult., Syst. Veg. 5: 192. 1819. Type: VENEZUELA: Ad Caracas, *Bredemeyer s.n.* (Holotype B, presumably destroyed). —**Psychotria acuminata** Benth.

Psychotria cyanococca Seem., Fl. Mag. *tab. 479*. 1870. Type: NICARAGUA: Chontales, *Seemann s.n.* (Holotype presumably BM, n.v.).—**Status uncertain.**

Psychotria davidsei Dwyer, Ann. Missouri Bot. Gard. 67: 368. 1980. Type: PANAMA: Darién, Cerro Tacarcuna, summit camp along stream N of camp, 1550–1650 m, *A. Gentry & S. Mori 14071* (Holotype MO (not located 6/1996)).

Psychotria deflexa DC., Prodr. 4: 510. 1830. Type: FRENCH GUIANA: Without precise locality or collector (Holotype presumably G-DC (n.v.); Isotype G-DEL, n.v. (photo MO)).

Psychotria deneversii C. M. Taylor, Novon 6: 300, *fig. 2C, D.* 1996. Type: PANAMA: Comarca de San Blas, El Llano–Cartí road, 18 km from Interamerican Highway, headwaters of Atlantic-draining creeks, 9°19'N, 78°55'W, 300 m, 7 Sep 1984, *G. de Nevers 3861* (Holotype PMA 38224, n.v.; Isotype MO 4658111).

Psychotria dichroa (Standl.) C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 245. 1993. *Evea dichroa* Standl., Contr. U.S. Natl. Herb. 18: 124. 1916. Type: PANAMA: Chiriquí, humid forest of Cuesta de Las Palmas, southern slopes of Cerro de la Horqueta, 1700–2100 m, 17–19 Nov 1911, *H. Pittier 3218* (Holotype US 677615 (photos MEXU, PTBG); Isotype F). *Cephaëlis*.

Psychotria dispersa Standl., J. Wash. Acad. Sci. 18: 184. 1928. Type: COSTA RICA: Guanacaste, Los Ayotes, near Tilarán, 600–700 m, 21 Jan 1926, *P. C. Standley & J. Valerio 45548* (Holotype US 1254170 (photos MEXU, PTBG)).—**Psychotria pittieri** Standl.

Psychotria domingensis Jacq., Enum. Pl. Carib. 16. 1760. Type: SANTO DOMINGO (Hispaniola): *Jacquin* (no Jacquin material was located, according to Howard, 1989). *Palicourea*.

Psychotria dosbocensis Dwyer, Ann. Missouri Bot. Gard. 67: 370. 1980. Type: PANAMA: Veraguas, valley of Río Dos Bocas on road between Alto Piedra (above Santa Fé) and Calovébora, 350–400 m, 29 Aug 1974, *T. B. Croat 27427* (Holotype MO 2216296 (photo PTBG)).

Psychotria dressleri (Dwyer) C. W. Ham., Phytologia 64: 223. 1988. *Cephaëlis dressleri* Dwyer, Ann. Missouri Bot. Gard. 67: 68. 1980. Type: PANAMA: San Blas, forest southeast of Puerto Obaldía, 18 Aug 1971, *T. B. Croat 16801* (Holotype MO 2138462 (photo PTBG)).

Psychotria dukei Dwyer, Ann. Missouri Bot. Gard. 67: 371. 1980. Type: PANAMA:

Darién, Casi-Cana Trail on Cerro Campamiento, E of Tres Bocas, headwaters of Río Coas, 29 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 1245* (Holotype MO 2162265 (photo PTBG)).

Psychotria durilancifolia Dwyer, Ann. Missouri Bot. Gard. 67: 372. 1980. Type: PANAMA: Panamá, El Llano–Cartí Road, Gorgas Lab, Mosquito Project study area, 250 m, 1 Aug 1974, *T. B. Croat 26028* (Holotype MO 2240525 (photo PTBG)).—**Psychotria panamensis** Standl. var. **panamensis**

Psychotria dwyeri C. W. Ham., Phytologia 64: 223. 1988. Type: MEXICO: Oaxaca, Distr. de Choapam [Santiago Choapan], Santa María, Montaña Santa María, 1500 m, 7 Apr 1938, *Y. Mexia 9265* (Holotype NY, n.v.; Isotypes B, n.v., F (photo PTBG), GH, n.v., K, n.v., MO (photo PTBG), US).

Psychotria elata (Sw.) Hammel, Selbyana 12: 139. 1991. *Cephaëlis elata* Sw., Prodr. 45. 1788. Type: JAMAICA: *Swartz s.n.* (presumably S, n.v.).

Psychotria elongata Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 32. 1853. Type: NICARAGUA: Volcán de Mombacho, *Oersted 11594* (Holotype C (photos MEXU, PTBG), fragment US (photos MEXU, PTBG); Isotype K, n.v.).—**Psychotria nervosa** Sw. var. **nervosa**

Psychotria emetica L. f., Suppl. Pl. 144. 1781. Type: COLOMBIA: America septentrionalis provinciae Gironensis, *Mutis 1602* (Holotype LINN, n.v.; probable Isotype US (photo PTBG)). *Uragoga*.

Psychotria erecta (Aubl.) Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 24. 1943. *Ronabea erecta* Aubl., Hist. Pl. Guian. 1: 156. 1775. Type: FRENCH GUIANA: In sylvis Oyao, Orapu, Sinemari, *Aublet s.n.* (Holotype presumably BM, n.v.).

Psychotria erythrocarpa Schltdl., Linnaea 9: 595. 1834. Type: MEXICO: Veracruz, Hacienda de la Laguna, *Schiede & Deppe 385* (Holotype B, presumably destroyed (photo & fragment F); Isotype K, n.v.). *Uragoga*.

Psychotria eugenifolia Dwyer, Ann. Missouri Bot. Gard. 67: 375. 1980. Type: PANAMA: Darién, top of W peak of Cerro Tacarcuna massif, 1800–1850 m, 28 Jan 1975, *A. Gentry & S. Mori 13984* (Holotype MO 2280217 (photos MEXU, PTBG)).—**Psychotria goldmanii** Standl.

Psychotria eurycarpa Standl., J. Wash. Acad. Sci. 18: 275. 1928. Type: COSTA RICA: Guanacaste, Quebrada Serena, southeast of Tilarán, 700 m, 27 Jan 1926, *P. C. Standley & J. Valerio 46237* (Holotype US 1254544 (photos MEXU, PTBG)).

Psychotria (?) *excelsa* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 355, *tab. 282*. 1819. Type: MEXICO: Veracruz, Xalapa, *A. Bonpland 1445* (Holotype P-Bonpland, n.v.; Isotypes B, n.v. (photo MO), P (photos MEXU, PTBG)). *Deppea*.—**Hoffmannia excelsa** (Kunth) K. Schum.

Psychotria faxlucens Lorence & Dwyer, Bol. Soc. Bot. México 47: 50. 1987. Type: MEXICO: Veracruz, Mun. de Catemaco, Ejido de Coscoapan, 8 km SE de Coyame, 16 Abr 1974, *F. Ponce & R. Cedillo T. 2* (Holotype MEXU; Isotypes F (photo PTBG), MO).

Psychotria fendleri Standl., Contr. U.S. Natl. Herb. 18: 129. 1916. Type: PANAMA: Chagres, Isthmus of Panama, 25 Feb 1850, *Fendler 59* (Holotype US 48567 (photos MEXU, PTBG); Isotype GH (photos MEXU, PTBG)).

Psychotria fimbriata Benth., J. Bot. Hook. 3: 226. 1841. Type: GUYANA: Essequibo River, *Schomburgk 51* (Holotype presumably K, n.v.). *Rudgea*.—**Rudgea cornifolia** (Kunth) Standl.

Psychotria flava Oerst. ex Standl., J. Wash. Acad. Sci. 17: 341. 1927. Type: MEXICO: Veracruz, Misantla, *F. Liebmann 11605* (Holotype C (photos F, MEXU, MO, PTBG)).

Psychotria fosteri C. W. Ham., Phytologia 64: 224. 1988. Type: PANAMA: Veraguas, Playa Rosario, northern tip of Coiba Island, 26 Aug 1970, *R. Foster 1605* (Holotype DUKE, n.v.; Isotypes F, GH, MO (photo PTBG)).

Psychotria fruticetorum Standl., J. Arnold Arbor. 11: 42. 1930. Type: HONDURAS: Comayagua, vicinity of Siguatepeque,

1080–1400 m, 14–27 Feb 1928, *P. C. Standley 56197* (Holotype F 581450 (photos MEXU, PTBG); Isotype A, n.v.).

Psychotria furcata DC., Prodr. 4: 512. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).

Psychotria galeottiana (M. Martens) C. M. Taylor & Lorence, Taxon 34: 669. 1985. *Palicourea galeottiana* M. Martens, Bull. Acad. Roy. Sci. Bruxelles 14: 136. 1844. Type: MEXICO: Oaxaca, Cordillera, 6500 ft., 1840, *H. Galeotti 2602* (Lectotype BR (photos MEXU, PTBG); Isolectotypes K, n.v., P (photos MEXU, PTBG); designated by Taylor & Lorence, 1985). *Uragoga*.

Psychotria gardenioides (Scheidw.) Standl., J. Wash. Acad. Sci. 17: 342. 1927. *Rhodostoma gardenioides* Scheidw., Allg. Gartenzeitung 10: 286. 1842. Type: Based on cultivated material of uncertain origin, presumably from Veracruz, Mexico. Type not designated. *Palicourea*.

Psychotria gatunensis Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 142. 1976. Type: PANAMA: Canal Zone, W of Limón Bay, Gatún Locks and Gatún Lake, 5 Aug 1955, *Johnston 1554* (Holotype MO 1709657; Isotypes A (2 sheets)).—**Psychotria calophylla** Standl.

Psychotria gentryi (Dwyer) C. M. Taylor, Novon 4: 305. 1994. *Cephaëlis gentryi* Dwyer, Selbyana 2: 57. 1977. Type: ECUADOR: Los Ríos, Río Palenque Science Center, km 56 of Quevedo–Santo Domingo road, 150-220 m, 19 Sep 1972, *C. Dodson 5169* (Holotype MO 2281982; Isotypes RPSC, n.v., SEL, n.v.).

Psychotria glauca Pol., Linnaea 41: 569. 1877. Syntypes: COSTA RICA: San José, *H. Polakowski 377* (B, presumably destroyed); *H. Polakowski 378* (B, presumably destroyed).—**Psychotria pubescens** Sw.

Psychotria glomerulata (Donn. Sm.) Steyerm., Mem. New York Bot. Gard. 23: 670. 1972. *Cephaëlis glomerulata* Donn. Sm., Bot. Gaz. (Crawfordsville) 16: 12, *pl. 1*. 1891. Type: GUATEMALA: Dept. Livingston, Río Dulce, Mar 1880, *J. D. Smith 1637* (Holotype US 943529 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Psychotria goldmanii Standl., Contr. U.S. Natl. Herb. 18: 130. 1916. Type: PANAMA: Panamá, Mont Pirre, head of Río Limón, 1500 m, 1 Mar 1911, *E. A. Goldman 1883* (Holotype US 716141 (photos MEXU, PTBG)).

Psychotria graciliflora Benth. in Oerst., Videnskr. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 35. 1853. Type: COSTA RICA: Alajuela, ad Naranjo, Apr 1847, *Oersted 11611* (Holotype C (photos F, MEXU, PTBG); Isotype US (photos MEXU, PTBG)). *Mapouria, Uragoga*.

Psychotria gracilis Ruiz & Pav., Fl. Peruv. 2: 63, *t. 211, fig. C*. 1799. Type: PERU: Huánuco, Pillao et Pueblo Nuevo, *Ruiz López & Pavón s.n.* (presumably MA, n.v.).—**Geophila gracilis** (Ruiz & Pav.) DC.

Psychotria granadensis Benth. in Oerst., Videnskr. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 34. 1853. Type: NICARAGUA: Granada, *Oersted 11612* (Holotype C (photos MEXU, PTBG)). *Uragoga*.—**Psychotria nervosa** Sw.

Psychotria grandicarpa Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 42. 1968. Type: PANAMA: Panamá, Cerro Jefe, 12 Mar 1967, *J. D. Dwyer, Baker & Gauger 7244* (Lectotype MO 2002447; Isolectotypes MO 2002694, MO 2002695; designated by Hamilton, 1989).—**Psychotria calophylla** Standl.

Psychotria grandis Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: JAMAICA: Interioris occidentalis, *Swartz s.n.* (Holotype S, n.v. (photo A)). *Uragoga*.

Psychotria grandistipula Standl., J. Wash. Acad. Sci. 18: 276. 1928. Not *Psychotria grandistipula* Merrill, 1923. Type: COSTA RICA: San José, vicinity of Santa María de Dota, 1500–1800 m, 26 Dec 1925–3 Jan 1926, *P. C. Standley & J. Valerio 43268* (Holotype US 1253164 (photos MEXU, PTBG)).—**Psychotria panamensis** Standl. var. **panamensis**

Psychotria guadalupensis (DC.) Howard, J. Arnold Arbor. 47: 139. 1966. *Loranthus guadalupensis* DC., Prodr. 4: 294. 1830. Type: GUADALOUPE: *Bertero s.n.* (Holotype G-DC, n.v. (microfiche IDC 800.666: II.2)).

Psychotria guapilensis (Standl.) Hammel, Selbyana 12: 139. 1991. *Evea guapilensis* Standl., J. Wash. Acad. Sci. 15: 104. 1925. Type: COSTA RICA: Limón, vicinity of Guápiles, 300–500 m, *P. C. Standley 37025* (Holotype US 1153029 (photos MEXU, PTBG)). *Cephaëlis*.

Psychotria haematocarpa Standl., J. Wash. Acad. Sci. 18: 274. 1928. Type: COSTA RICA: Guanacaste, Naranjos Agrios, near Tilarán, 600–700 m, 29 Jan 1926, *P. C. Standley & J. Valerio 46407* (Holotype US 1254627 (photos MEXU, PTBG)).

Psychotria hammelii Dwyer, Ann. Missouri Bot. Gard. 67: 383. 1980. Type: PANAMA: Veraguas, forested mountains W of Alto de Piedras, W of Santa Fé, 3200–5600 ft., 8 Sep 1978, *B. Hammel 4634* (Holotype MO 2680614 (photos MEXU, PTBG); Isotype MO).

Psychotria hazenii Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 96. 1930. Type: COLOMBIA: El Valle, *Killip 5573* (Holotype US, n.v.; Isotypes GH, n.v., NY, n.v.).

Psychotria hebeclada DC., Prodr. 4: 513. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).

Psychotria herbacea Jacq., Enum. Pl. Carib. 16. 1760. Type: MARTINIQUE: *Jacquin* (location unknown). *Geophila*.—**Geophila gracilis** (Ruiz & Pav.) DC.

Psychotria herbacea Sessé & Moç., Fl. Mexic., ed. 2, 58. 1894, not *Psychotria herbacea* Jacq., 1760. Type: MEXICO: Habitat in umbrosis montibus prope Oppidium de la Aguadilla, floret Maio, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Psychotria heydei Standl., J. Wash. Acad. Sci. 18: 184. 1928. Type: GUATEMALA: Quiché, Chiúl, 2600 m, Apr 1892, *Heyde & Lux 3173* (Holotype US 939642 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).

Psychotria hirsuta (M. Martens & Galeotti) Müll. Arg. in Mart., Fl. Bras. 6(5): 370. 1881. *Cephaëlis hirsuta* M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 35. 1844. Type: MEXICO: Oaxaca, La Chinantla, 4000 pieds, *H. Galeotti 7185* (Holotype BR, n.v.).—**Psychotria poeppigiana** Müll. Arg.

Psychotria hoffmannseggiana (Willd. ex Roem. & Schult.) Müll. Arg. in Mart., Fl. Bras. 6(5): 336. 1881. *Cephaëlis hoffmannseggiana* Willd. ex Roem. & Schult., Syst. Veg. 5: 214. 1819. Type: BRAZIL: Pará, *Sieber in Hoffmannsegg s.n.* (location unknown).

Psychotria hondensis Standl., J. Wash. Acad. Sci. 18: 183. 1928. Type: COSTA RICA: Bois de Río Hondo, versant atlantique, 100 m, Aug 1901, *H. Pittier 16161* (Holotype US 764151 (photos MEXU, PTBG)).—**Coussarea hondensis** (Standl.) C. M. Taylor & W. C. Burger

Psychotria horizontalis Sw., Prodr. Veg. Ind. Occ. 44. 1788. Type: SANTO DOMINGO: *Swartz s.n.* (presumably S, n.v. (photo A)). *Uragoga*.

Psychotria horizontalis Sw. subsp. *basicorda* Dwyer, Ann. Missouri Bot. Gard. 55: 42. 1968. Type: PANAMA: Veraguas, Isla de Coiba (Penal Colony), Camp Aguja, 8 Jul 1962, *J. D. Dwyer 2384A* (Holotype MO 2165270 (photos MEXU, PTBG); Isotype MO).—**Psychotria horizontalis** Sw.

Psychotria hornitensis Dwyer & C. W. Ham., Phytologia 64: 225. 1988. Type: PANAMA: Chiriquí, ridge and summit of Cerro Hornito, above Los Planes de Hornito, 2100 m, 14 Mar 1982, *S. Knapp et al. 4198* (Holotype MO (not located 6/1996)).

Psychotris impatiens Dwyer, Ann. Missouri Bot. Gard. 67: 385. 1980. Type: PANAMA: Darién, north slopes of Cerro Pirre, 700–950 m, 6 Apr 1975, *S. Mori & J. Kallunki 5446* (Holotype MO 2272508 (photos MEXU, PTBG)).

Psychotria incurvata Sessé & Moç., Fl. Mexic., ed. 2, 58. 1894. Type: MEXICO: Habitat in Tuxtlae sylvis. Floret Julio, *Sessé & Moçiño*

s.n. (presumably MA, n.v.).—**Status uncertain.**

Psychotria indigotica Dwyer, Ann. Missouri Bot. Gard. 67: 386. 1980. Type: PANAMA: Canal Zone, forest of Gatun, 15 Sep 1967, *A. Hladik 511* (Holotype MO 2165124). —**Rudgea isthmensis** Standl.

Psychotria insignis Standl., Contr. U.S. Natl. Herb. 18: 130. 1916. Type: PANAMA: San Blas, hills of Sperdi, near Puerto Obaldía, San Blas coast, 20–200 m, Sep 1911, *H. Pittier 4410* (Holotype US 679567 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).

Psychotria insueta (Dwyer) C. W. Ham., Phytologia 64: 226. 1988. *Cephaëlis insueta* Dwyer, Ann. Missouri Bot. Gard. 67: 73. 1980. Type: PANAMA: Veraguas, 11 km from Escuela Agrícola Alto de Piedra, in forest along Río Dos Bocas, tropical wet forest, Atlantic slope, 15 Nov 1974, *S. Mori & J. Kallunki 3108* (Holotype MO 2220981 (photo PTBG)).

Psychotria ipecacuanha (Brot.) Stokes, Bot. Mat. Med. 1: 365. 1812. *Callicocca ipecacuanha* Brot., Trans. Linn. Soc. London 6: 137. 1802. Type: BRAZIL: *Gómez s.n.* (presumably LISU, n.v.). *Cephaëlis. Evea, Uragoga.*

Psychotria izabalensis L. O. Williams, Phytologia 28: 229. 1974. Type: GUATEMALA: Izabal, vicinity Lago Izabal, 600 m, 22 Apr 1966, *G. C. Jones, G. R. Proctor & L. Facey 3024* (Holotype F 1665554 (photos MEXU, PTBG)).

Psychotria izabalensis L. O. Williams subsp. **oaxacana** Lorence, Bol. Soc. Bot. México 47: 53. 1987. Type: MEXICO: Oaxaca, Distr. de Ixtlán, Sierra de Juárez, Ruta 175 Tuxtepec a Oaxaca, 2.5 km NE de Puerto Eligio, 800 m, 1 Jun 1983, *D. Lorence & R. Cedillo T. 4250* (Holotype MEXU; Isotypes BM, BR, CAS, ENCB, F, MO, NY, UC, US, XAL).

Psychotria jimenezii Standl., J. Wash. Acad. Sci. 15: 288. 1925. Type: COSTA RICA: San José, La Hondura, 1300–1700 m, 16 Mar 1924, *P. C. Standley 37892* (Holotype US 1153107 (photos MEXU, PTBG)).

Psychotria jinotegensis C. Nelson, A. R. Molina & Standl., Phytologia 50: 1. 1981. var. **jinotegensis**. Type: NICARAGUA: Jinotega, region of La Montañita and Las Mesitas in sierra W of Jinotega, ca. 1100–1400 m, 29 Jun 1947, *P. C. Standley 10314* (Holotype EAP, n.v.; Isotype F).

Psychotria jinotegensis C. Nelson, A. R. Molina & Standl. var. **morazanensis** C. W. Ham., Ann. Missouri Bot. Gard. 76: 408. 1989. Type: EL SALVADOR: Morazán, easternmost peak, Monte de Cascaquatique, near summit on N side, 1500 m, 25 Dec 1941, *J. M. Tucker 610* (Holotype US, n.v.; Isotypes F (photo PTBG), K, n.v., NY, n.v., P (photo PTBG)).

Psychotria juarezana C. M. Taylor & Lorence, Novon 2: 264, *fig. 2*. 1992. Type: MEXICO: Oaxaca: Distr. de Ixtlán, Sierra de Juárez, ruta 175, Tuxtepec a Oaxaca ca. 4 km al SO de La Esperanza, 1,700 m, 4 Apr 1983, *D. H. Lorence & R. Cedillo T. 4266* (Holotype MO 3750634; Isotype MEXU).

Psychotria justicioides Schltdl., Linnaea 9: 596. 1834. Type: MEXICO: Barranca de Tioselo, *Schiede & Deppe 259* (Holotype presumably HAL, n.v.; Isotypes B, presumably destroyed (photo MO), P (photos MEXU, PTBG)). *Uragoga.*—**Psychotria hebeclada** DC.

Psychotria laevis DC. var. *angustifolia* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 15. 1853. Type: NICARAGUA: Monte Pantasmo, Jan 1848, *Oersted 11652* (Holotype C (photos MEXU, PTBG)).—**Psychotria uliginosa** Sw.

Psychotria lamarinensis C. W. Ham., Phytologia 64: 227. 1988. Type: COSTA RICA: Alajuela, east of Río Rafael and south of the hot springs west of La Marina, 500 m, 19 May 1968, *W. C. Burger & R. G. Stoltze 5062* (Holotype NY, n.v.; Isotype MO (photo PTBG)).

Psychotria laselvensis C. W. Ham., Phytologia 64: 228. 1988. Type: COSTA RICA: Heredia, Finca La Selva, OTS field station, Río Puerto Viejo just E of its junction with Río Sarapiquí, 100 m, 19 May 1980, *B. Hammel 8706* (Holotype DUKE, n.v.; Isotype CR, n.v.).

Psychotria liesneri Dwyer, Ann. Missouri Bot. Gard. 67: 387. 1980. Type: PANAMA: Panamá, NE of town of Cerro Azul, 20 km by road from Inter-American Hwy., 10 Dec 1974, *S. Mori & J. Kallunki 3658* (Holotype MO 2257865 (photos MEXU, PTBG)).

Psychotria lilacina Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 252. 1947. Type: GUATEMALA: Huehuetenango, Cerro Huitz, between Mimahuitz and Yulhuitz, Sierra de los Cuchumatanes, 1500–2600 m, 14 Jul 1942, *J. A. Steyermark 48564* (Holotype F 1133819 (photos MEXU, PTBG)).—**Psychotria minarum** Standl. & Steyerm.

Psychotria limonensis K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 43. 1916. Type: COSTA RICA: Limón, Ilot de la Uvita, Puerto Limón, Jul 1898, *H. Pittier 12681* (Holotype B, presumably destroyed (photo and fragment F); Isotype US (photos MEXU, PTBG)).

Psychotria limonensis K. Krause var. *angustifolia* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 17: 282. 1937. Type: GUATEMALA: Suchitepéquez, Finca Moca, 1020 m, 7 Jan 1935, *A. F. Skutch 2073* (Holotype F 934091 (photos MEXU, PTBG); Isotype A, n.v.).—**Psychotria clivorum** Standl. & Steyerm.

Psychotria limonensis K. Krause var. *laxinervia* Loes., Repert. Sp. Nov. 18: 361. 1922. Type: MEXICO: Chiapas, ruinas del Palenque, 10 Mar 1911, *E. Seler & C. Seler 5463 (384)* (Holotype B, presumably destroyed (photo US; fragment F); Isotype GH (photo PTBG)).—**Psychotria limonensis** K. Krause

Psychotria longicollis Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 33. 1853. Type: COSTA RICA: Insula San Lucas, *Oersted 11621* (Lectotype C (photos MEXU, PTBG), here designated; Isolectotype C (lower right-hand collection numbered 11621, mounted on same sheet with Syntype *Oersted 11622*). Syntypes: COSTA RICA: In monte Aguacate, Nov 1846, *Oersted 11622* (C (photos MEXU, PTBG)); Aguacate, *Oersted 11629* (C (photos MEXU, PTBG)). *Oersted 11621,* a flowering specimen with a duplicate, is the most appropriate choice for lectotype. *Uragoga*.—**Psychotria horizontalis** Sw.

Psychotria longipedunculata Dwyer, Ann. Missouri Bot. Gard. 67: 389. 1980. Not *Psychotria longipedunculata* (Gardn.) Muell. Arg. in Mart., 1881, nor Elmer, 1911. Type: PANAMA: Veraguas, valley of Río Dos Bocas, 15.6 km NW of Santa Fé, road between Escuela Agrícola Alto Piedra and Calovébora, 450–550 m, 31 Aug 1974, *T. B. Croat 27621* (Holotype MO 2203532).—**Psychotria longipedunculoides** C. M. Taylor

Psychotria longipedunculoides C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 257. 1993. Nom. nov. for *Psychotria longipedunculata* Dwyer, 1980, not *P. longipedunculata* (Gardn.) Muell. Arg. in Mart., 1881. Type: PANAMA: Veraguas, valley of Río Dos Bocas, 15.6 km NW of Santa Fé, road between Escuela Agrícola Alto Piedra and Calovébora, 450–550 m, 31 Aug 1974, *T. B. Croat 27621* (Holotype MO 2203532).

Psychotria lundellii Standl. in Lundell, Contr. Univ. Michigan Herb. 4: 29. 1940. Type: BRITISH HONDURAS (BELIZE): El Cayo District, Valentin, in advanced forest, limestone valley, 26 Jun 1936, *C. L. Lundell 6260* (Holotype F 861235 (photos MEXU, PTBG); Isotypes GH, n.v., MICH, n.v., NY, n.v., TEX-LL (photos MEXU, PTBG), US (photo PTBG)).

Psychotria luteotuba Lorence, Bol. Soc. Bot. México 47: 55. 1987. Type: MEXICO: Veracruz, Mun. de Hidalgotitlán, zona de Uxpanapa, Río Solosuchil a 5–6 km ESE de Hermanos Cedillo, 100–200 m, 24 Mar 1982, *D. Lorence, T. Wendt, R. Riviere, M. Vázquez T., A. S. Ton & I. Navarrete 3910* (Holotype MEXU; Isotypes BM, BR, CHAPA, ENCB, F, MO, UC, XAL).—**Psychotria phanaerandra** (Standl. & Steyerm.) Lorence

Psychotria luxurians Rusby, Mem. Torrey Bot. Club 6: 50. 1896. Type: BOLIVIA: Between Tipuani and Guanai, Dec 1892, *Bang 1741* (Lectotype US 1393044 (photos PTBG), here

designated; Isolectotypes US (2 sheets; photos PTBG)).

Psychotria macrophylla Ruiz & Pav., Fl. Peruv. 2: 56, *pl. 202, fig. a*. 1799. Type: PERU: Huánuco, Andes of Peru, nemoribus versus Pillao ad Iscutunam, *Ruiz López & Pavón s.n.* (presumably MA, n.v.).

Psychotria macrophylla Ruiz & Pav. var. *angustissima* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 203. 1940. Type: PANAMA: Darién, Caná-Cuasi Trail, north slope, 5500 ft., 16 Mar 1940, *M. E. Terry & R. A. Terry 1597* (Holotype F 1034533 (photos MEXU, PTBG)).—**Psychotria macrophylla** Ruiz & Pav.

Psychotria macropoda Ruiz & Pav., Fl. Peruv. 2: 63, *pl. 211, fig. b*. 1799. Type: PERU: Huánuco, nemoribus secus Pillao ad Iscutuvam, *Ruiz López & Pavón s.n.* (presumably MA, n.v.).—**Geophila macropoda** (Ruiz & Pav.) DC.

Psychotria magna Standl., Contr. U.S. Natl. Herb. 18: 131. 1916. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre de Dios), 10–104 m, Aug 1911, *H. Pittier 4092* (Holotype US 679188 (photos MEXU, PTBG)).—**Psychotria panamensis** Standl. var. **compressicaulis** (K. Schum.) C. W. Ham.

Psychotria marginata Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: JAMAICA: In sylvestribus, *Swartz s.n.* (Holotype S, n.v. (photo A); possible Isotype C (photos MEXU, PTBG)). *Uragoga.*

Psychotria maxonii Standl., Proc. Biol. Soc. Wash. 37: 53. 1924. Type: COSTA RICA: Cartago, Santa Clara de Cartago, 20 Jul 1903, *W. R. Maxon & A. D. Harvey 8250* (Holotype US 1180093 (photos MEXU, PTBG)).

Psychotria megalantha Lorence, Bol. Soc. Bot. México 47: 58. 1987. Type: MEXICO: Oaxaca, Distr. de Ixtlán, Sierra de Juárez, Ruta 175 Tuxtepec a Oaxaca, 5 km NE de Vista Hermosa, 1300 m, 28 May 1983, *D. Lorence & R. Cedillo T. 4190* (Holotype MEXU; Isotypes BM, BR, CAS, ENCB, F, K, MEXU, MO, NY, UC, US, WIS, TEX, XAL).

Psychotria mexiae Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 296. 1929. Type: MEXICO: Jalisco, Santa Cruz de Vallarta, 300 m, 9 Dec 1926, *Y. Mexia 1262* (Holotype F 579924 (photos MEXU, PTBG); Isotypes A, n.v., C (photos MEXU, PTBG), GH (photo PTBG), MO (photos MEXU, PTBG), US (2 sheets; photos MEXU, PTBG; fragment F)).

Psychotria mexicana Willd. ex Roem. & Schult., Syst. Veg. 5: 189. 1819. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (presumably B-WI, n.v.). *Uragoga.*—**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Psychotria micrantha Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 363, *pl. 284*. 1819. Type: PERU: *A. Bonpland s.n.* (Holotype P-Bonpland, n.v. (fragment F)). *Mapouria, Uragoga.*

Psychotria microbotrys Ruiz ex Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 204. 1930. Type: PERU: Loreto, *Williams 2983* (Holotype F, n.v.).

Psychotria microdesmia Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 36. 1853. Type: COSTA RICA: Ad Jaris, *Oersted 11610* (Holotype C (photos MEXU, MO, PTBG); Isotypes C (photos MEXU, PTBG), US (photo PTBG)). *Uragoga.*—**Psychotria viridis** Ruiz & Pavón

Psychotria microdon (DC.) Urb., Symb. Antill. 9: 539. 1928. *Rondeletia microdon* DC., Prodr. 4: 408. 1830. Type: CUBA: Havana, *de la Ossa s.n.* (Holotype G-DC, n.v. (microfiche IDC 800.691: III.7, 8)).

Psychotria mima Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 386. 31 Oct 1940. Type: COSTA RICA: Cartago, vicinity of Pejivalle, 600–850 m, Jan 1940, *A. F. Skutch 4589* (Holotype F 1044330 (photos MEXU, PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG). Nomen. illegit., not *Psychotria mima* Standl. 10 Sep 1940 [Type from Brazil].—**Psychotria angustiflora** K. Krause

Psychotria minarum Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 253. 1947. Type: GUATEMALA: El Progreso (Sierra de las Minas), between Calera and summit of

Volcán Siglo, 2000–3000 m, 21 Jan 1942, *J. A. Steyermark 43106* (Holotype F 1133839 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Psychotria miradorensis (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 50. 1881. *Mapouria miradorensis* Oerst., Amér. Centr. 17, *tab. 14, fig. 9*. 1863. Type: MEXICO: Veracruz, Mirador, in quercetum, 3000 ft., *F. Liebmann 11662* (Lectotype C (photos MEXU, PTBG); Isolectotype US, n.v.; designated by Hamilton, 1989). Syntypes: MEXICO: Veracruz, Mirador, Apr 1847, *F. Liebmann 11577* (C (photos MEXU, PTBG)); Mirador, *F. Liebmann 11614* (C (photos MEXU, PTBG)). *Psychotria, Uragoga*.—**Psychotria costivenia** Griseb. var. **costivenia**

Psychotria mirandae C. W. Ham., Phytologia 64: 229. 1988. Type: MEXICO: Chiapas, Berriozabal a las Vistas, 17 Jul 1949, *F. Miranda 5395* (Holotype US, n.v.; Isotype MEXU).

Psychotria molinae Standl., Ceiba 1: 46. 1950. Type: HONDURAS: Morazán, drainage of the Río Yeguare, at about longitude 87°W and latitude 14°N, in cloud forest on Mt. Uyuca, 2000 m, 20 Aug 1946, *L. O. Williams & A. Molina R. 10390* (Holotype F 1264188 (photos MEXU, PTBG); Isotypes EAP, n.v., GH, n.v., MO (2 sheets; photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Psychotria panamensis** Standl. var. **panamensis**

Psychotria molinarum Lorence, Novon 7: 51. 1997. Based on *Evea chiapensis* Standl., Contr. U.S. Natl. Herb. 23: 1392. 1926. Not *Psychotria chiapensis* Standl., 1926. Type: MEXICO: Chiapas, Cerro del Boquerón, *C. A. Purpus 6928* (Holotype US 567214 (photos MEXU, PTBG); Isotypes F, MO (photos MEXU, PTBG)).

Psychotria molliramis (K. Schum. & K. Krause) Steyerm., Mem. New York Bot. Gard. 23: 529. 1972. *Palicourea molliramis* K. Schum. & K. Krause, Engl. Bot. Jahrb. 40: 337. 1908. Type: COLOMBIA: Cauca, prope La Junta ad Río d'Agua, 200–500 m, *Lehmann 4667* (Holotype B, presumably destroyed).—**Psychotria hebeclada** DC.

Psychotria mollis Poir. in Lam., Encycl. Méth. Bot. 5: 701. 1804. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype P-LA (photos MEXU, MO, PTBG)).—**Psychotria pubescens** Sw.

Psychotria mombachensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 188. 1930. Type: NICARAGUA: Mombacho Volcano, 600–750 m, 5 Jul 1923, *W. R. Maxon, A. D. Harvey & A. T. Valentine 7818* (Holotype F 600068 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Psychotria domingensis** Jacq.

Psychotria monteverdensis Dwyer & C. W. Ham., Phytologia 64: 230. 1988. Type: COSTA RICA: Guanacaste-Puntarenas border region, Cordillera de Tilarán, Monteverde, en cumbre de fila al oeste de Reserva, 1520–1590 m, 24 Jun 1977, *V. J. Dryer 1531* (Holotype MO 3235523 (photo PTBG); Isotype CR).

Psychotria morae Pol., Linnaea 41: 570. 1877. Type: COSTA RICA: San José, Jun 1875, *H. Polakowski 171* (Holotype B, presumably destroyed (photos GH, US)). *Uragoga*.—**Psychotria quinqueradiata** Pol.

Psychotria morii Dwyer, Ann. Missouri Bot. Gard. 67: 400. 1980. Type: PANAMA: Veraguas, 11 km from Escuela Agrícola Alto de Piedra, along Río Dos Bocas, Atlantic slope, 15 Nov 1974, *S. Mori & J. Kallunki 3139* (Holotype MO 2932202 (photo PTBG)).—**Psychotria siggersiana** Standl.

Psychotria mortoniana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 355. 1938. Type: COSTA RICA: San José, vicinity of El General, 950 m, Jul 1936, *A. F. Skutch 2697* (Holotype US 1642538 (photos F, MEXU, PTBG; fragment F); Isotypes GH, n.v., MO (photos MEXU, PTBG)).

Psychotria muscosa (Jacq.) Steyerm, Mem. New York Bot. Gard. 23: 671. 1972. *Morinda muscosa* Jacq., Sel. Stirp. Am. 65. 1763. Type: MARTINIQUE: *Jacquin s.n.* (Location unknown).

Psychotria nebulosa (Dwyer) C. M. Taylor, Novon 5: 205. 1995. *Coussarea nebulosa* Dwyer, Ann. Missouri Bot. Gard. 67: 131. 1980. Type: PANAMA: Chiriquí, Monte Rey near Boquete, 20 Jul 1971, *T. B. Croat 15868* (Holotype MO 2162999 (photo PTBG); Isotype MO 4043108).

Psychotria neillii C. W. Ham. & Dwyer, Phytologia 64: 231. 1988. Type: NICARAGUA: Río San Juan, Río Sábalos, 2 km al W de Santa Eduviges, 80 m, 18 Feb 1984, *P. P. Moreno 23060* (Holotype MO 3192079 (photo PTBG)).

Psychotria nervosa Sw., Prodr. 43. 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (Holotype S, n.v. (photo A)).

Psychotria nervosa Sw. var. *rufescens* (Kunth) L. O. Williams, Phytologia 26: 492. 1973. *Psychotria rufescens* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 364. 1819. Type: VENEZUELA: Caripe, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotype B, presumably destroyed (photos F, MO)).—**Psychotria nervosa** Sw.

Psychotria nervosa Sw. subsp. *rufescens* (Kunth) Steyerm., Mem. New York Bot. Gard. 23: 480. 1972. *Psychotria rufescens* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 364. 1819. Type: VENEZUELA: Caripe, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotype B, presumably destroyed (photos F, MO)).—**Psychotria nervosa** Sw.

Psychotria nicaraguensis Benth. in Oerst., Viddensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 34. 1853. Type: NICARAGUA: Río San Juan, *Oersted 11634* (Lectotype C, here designated (photos MEXU, PTBG)). Syntype: COSTA RICA: Ad Jaris, *Oersted 11635* (C (photos MEXU, PTBG)). *Oersted 11634* is the better choice for lectotype as it is a well developed fruiting specimen. *Uragoga*.—**Psychotria marginata** Sw.

Psychotria nicotianifolia M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 229. 1844 [as *nicotianaefolia*]. Type: MEXICO: Veracruz, Mirador, 3000 ft., *H. Galeotti 7066* (Holotype BR, n.v.; Isotypes G-DC (photo MO), P (label states "cerca Xalapa," photos MEXU, PTBG)).—**Hoffmannia nicotianifolia** (M. Martens & Galeotti) L. O. Williams

Psychotria nubiphila Dwyer, Ann. Missouri Bot. Gard. 67: 403. 1980. Type: PANAMA: Chiriquí, NW side of Cerro Pando, *T. B. Croat 15990* (Holotype MO).—**Psychotria panamensis** Standl. var. **panamensis**

Psychotria oaxacana Standl., Contr. U.S. Natl. Herb. 23: 1391. 1926. Type: MEXICO: Oaxaca, from near Santo Domingo, 1600 ft., 18 Jun 1895, *E. W. Nelson 2688* (Holotype US 574444 (photos MEXU, PTBG)).—**Psychotria graciliflora** Benth. in Oerst.

Psychotria obovata (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 50. 1881. *Mapouria obovata* Oerst., Amér. Centr. 17, *tab. 14, figs. 3, 4*. 1863. Not *Psychotria obovata* Ruiz & Pav., 1799. Type: MEXICO: Veracruz, *F. Liebmann s.n.* (Holotype C, n.v.).—**Psychotria quinqueradiata** Pol.

Psychotria oerstediana (Kuntze) Standl., Contr. U.S. Natl. Herb. 23: 1390. 1926. *Uragoga oerstediana* Kuntze, Rev. Gen. Pl. 2: 957. 1891. Based on *Mapouria obovata* Oerst., Amér. Centr. 17, *tab. 14, figs 3, 4*. 1863. Type: MEXICO: Veracruz, *F. Liebmann s.n.* (Holotype C, n.v.).—**Psychotria quinqueradiata** Pol.

Psychotria officinalis (Aubl.) Raeusch. ex Sandwith, Kew Bull. 1931: 473. 1931. *Nonatelea officinalis* Aubl., Hist. Pl. Guiane 1: 182, *tab. 70*. 1775. Type: FRENCH GUIANA: Cayenne, *Aublet s.n.* (presumably BM, n.v.).

Psychotria olgae Dwyer & Hayden, Ann Missouri Bot. Gard. 55: 42, *fig. 3*. 1968. Type: PANAMA: Panamá, between Cerro Jefe and Eneida, 2100–2900 ft., 17 Jan 1968, *J. D. Dwyer, J. Duke & R. Dressler 8193* (Holotype MO 1962026 (photos MEXU, PTBG); Isotypes DUKE, n.v., F, NY, n.v.).

Psychotria orchidearum Standl., J. Wash. Acad. Sci. 18: 276. 1928. Type: COSTA RICA: Heredia, Cerros de Zurquí, northeast of San Isidro, 2000–2400 m, 3 Mar 1926, *P. C.*

Standley & J. Valerio 50863 (Holotype US 1306503 (photos MEXU, PTBG)).

Psychotria orchidearum Standl. subsp. *persedens* Dwyer, Ann. Missouri Bot. Gard. 67: 407. 1980. Type: PANAMA: Panamá, Cerro Campana, 2500 ft., 7 Feb 1969, *E. L. Tyson 5331* (Holotype MO 1973872). —**Status uncertain**, probably **Psychotria orchidearum** Standl.

Psychotria oreodoxa L. O. Williams, Phytologia 28: 230. 1974. Type: GUATEMALA: Suchitepéquez, south-facing slopes and barrancos of Volcán Santa Clara, 1½–2 miles west of Finca El Naranjo, 1250 m, 1 Jun 1942, *J. A. Steyermark 46803* (Holotype F 1133947 (photos MEXU, PTBG)).

Psychotria oresbia Dwyer, Ann. Missouri Bot. Gard. 67: 408. 1980. Type: PANAMA: Darién, Cerro Tacarcuna W ridge, trail toward Río Pucuro just below summit camp, 1500–1600 m, 5 Feb 1975, *A. Gentry & S. Mori 14150* (Holotype MO 2280279 (photos MEXU, PTBG)).

Psychotria orogenes L. O. Williams, Phytologia 28: 231. 1974. Type: GUATEMALA: Baja Verapaz, Sierra de las Minas about 5 km south of Purulhá, 1600 m, 2 Jan 1973, *L. O. Williams, A. Molina R. & T. P. Williams 41924* (Holotype F 1722437 (photos MEXU, PTBG)).—**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Psychotria orosiana Standl., J. Wash. Acad. Sci. 15: 288. 1925. Type: COSTA RICA: Cartago, vicinity of Orosí, 30 Mar 1924, *P. C. Standley 39803* (Holotype US 1153182 (photos MEXU, PTBG)).

Psychotria ostaurea Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 143. 1967. Type: PANAMA: Bocas del Toro, vicinity of Chiriquí Lagoon, Water Valley, 1 Nov 1940, *H. von Wedel 1461* (Holotype MO 1240228 (photos MEXU, PTBG); Isotype F). —**Coussarea hondensis** (Standl.) C. M. Taylor & W. C. Burger

Psychotria ostreophora (Wernh.) C. M. Taylor, Novon 4: 305. 1994. *Cephaëlis ostreophora* Wernh., J. Bot. 55: 284. 1917. Type: COLOMBIA: Bogotá, Servitá y Villavicencio, *Triana s.n.* (Holotype BM, n.v.; Isotype F).

Psychotria pachecoana Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 205. 1940. Type: GUATEMALA: Baja Verapaz, mountain side of divide north of Santa Rosa, 1650 m, 30 Mar 1939, *P. C. Standley 69922* (Holotype F 994220 (photos MEXU, PTBG)). —**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Psychotria pacoroensis C. W. Ham., Phytologia 64: 232. 1988. Type: PANAMA: Panamá, vicinity of Cerro Jefe, Altos de Pacora, 2400 ft., 18 Dec 1980, *T. Antonio 3241* (Holotype MO 2892015 (photo PTBG); Isotype ENCB, n.v.).

Psychotria padifolia Willd. ex Roem. & Schult., Syst. Veg. 5: 189. 1819. Type: MEXICO: Veracruz, Xalapa, *Humboldt & Bonpland 4420* (Holotype B-WI (photos DUKE, F, MO, NY)).—**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Psychotria panamensis Standl., Contr. U.S. Natl. Herb. 18: 132. 1916. var. **panamensis**. Type: PANAMA: Chiriquí, humid forest around Los Siguas Camp, southern slope of Cerro de la Horqueta, 1700 m, 17–19 Mar 1911, *H. Pittier 3194* (Holotype US 677588 (photos MEXU, PTBG)).

Psychotria panamensis Standl. var. **compressicaulis** (K. Krause) C. W. Ham., Phytologia 64: 233. 1988. *Psychotria compressicaulis* K. Krause, Bot. Jahrb. Syst. 54, Beibl. 119: 44. 1916. Type: COSTA RICA: Cartago, Tuis, 600 m, Jul 1898, *H. Pittier 12412* (Holotype B, destroyed (photo GH); Isotype US (photos MEXU, PTBG)).

Psychotria panamensis Standl. var. **ixtlanensis** C. W. Ham., Phytologia 64: 233. 1988. Type: MEXICO: Oaxaca, Distr. de Ixtlán, 21.4 km S de Valle Nacional, 1140 m, 28 Nov 1979, *T. Wendt et al. 2258* (Holotype MEXU 317322; Isotypes CHAPA, ENCB).

Psychotria panamensis Standl. var. **magna** (Standl.) C. W. Ham., Phytologia 64: 234. 1988. *Psychotria magna* Standl., Contr. U.S. Natl. Herb. 18: 131. 1916. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre

de Dios), 10–104 m, Aug 1911, *H. Pittier 4092* (Holotype US 679188 (photos MEXU, PTBG); Isotype US 693188).

Psychotria papantlensis (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 50. 1881. *Mapouria papantlensis* Oerst., Amér. Centr. 17, *tab. 14, fig. 5*. 1863. Type: MEXICO: Veracruz, Papantla, *F. Liebmann s.n.* (Holotype presumably C, n.v.). *Uragoga*.

Psychotria parasitica Sw., Prodr. Veg. Ind. Occ. 44. 1788, nomen illegit. citing *Viscoides pendulum* Jacq. 1763. (see Steyermark, 1972: 569 for discussion). *Uragoga*.—**Psychotria guadalupensis** (DC.) Howard

Psychotria parvifolia Benth. in Oerst., Vidensk. Meddel. Naturhist. Foren. Kjöbenhavn 1852: 36. 1853. Type: COSTA RICA: Ad Naranjo, Apr 1847, *Oersted 11637* (Holotype C (photos F, MEXU, MO, PTBG); Isotype US (photos MEXU, PTBG)).

Psychotria peperomiae Standl., Contr. U.S. Natl. Herb. 18: 132. 1916. Type: PANAMA: Chiriquí, top of Cerro de la Horqueta, 2265 m, 18 Mar 1911, *H. Pittier 3235* (Holotype US 677632, n.v.).—**Psychotria guadalupensis** (DC.) Howard

Psychotria perparva Dwyer, Ann. Missouri Bot. Gard. 67: 411. 1980. Type: PANAMA: Panamá, Cerro Tacarcuna Massif between summit camp on westernmost ridge and Pico Tacarcuna, mostly elfin forest, 1650–1800 m, 22 Jul 1976, *A. Gentry, H. Leon & L. Forero 16921* (Holotype MO 2416828 (photos MEXU, PTBG); Isotype F).

Psychotria persearum Standl., Ceiba 1: 48. 1950. Type: HONDURAS: Morazán, Cerro de Uyuca, ca. 1800 m, 2 Mar 1947, *P. C. Standley 4865* (Holotype F 1256865 (photos MEXU, PTBG); Isotype EAP, n.v.). —**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Psychotria phanaerandra (Standl. & Steyerm.) Lorence, Novon 2: 260. 1992. *Palicourea phanaerandra* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 252. 1947. Type: GUATEMALA: Izabal, Cerro San Gil, 1200 m, 26–27 Dec 1941, *J. A. Steyermark 41952* (Holotype F 1132612 (photo PTBG); Isotype US).

Psychotria philacra Dwyer, Ann. Missouri Bot. Gard. 67: 412. 1980. Type: PANAMA: Darién, Cerro Tacarcuna, S slope, ridge top forest well below summit, 1250–1450 m, 26 Jan 1975, *A. Gentry & S. Mori 13916* (Holotype MO 2280220 (photo PTBG)).

Psychotria phoeniciana Standl., J. Wash. Acad. Sci. 16: 17. 1926. Type: MEXICO: Chiapas, mountains near Fenix, May 1925, *C. A. Purpus 316* (Holotype US 1208247 (photos F, MEXU, PTBG)).—**Palicourea macrantha** Loes.

Psychotria pilosa Ruiz & Pav., Fl. Peruv. 2: 60, *pl. 208, fig. 1*. 1799. Type: PERU: *Ruiz López & Pavón s.n.* (Holotype presumably MA, n.v.; Isotype B, n.v (photo MO)).

Psychotria pinularis Sessé & Moç., Fl. Mexic., ed. 2, 57. 1894. Type: PUERTO RICO: Habitat in monticulo de la Aguadilla vicino, *Sessé & Moçiño s.n.* (presumably MA, n.v.). —**Psychotria microdon** (DC.) Urb.

Psychotria pithecobia Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 187. 1930. Type: COSTA RICA: La Palma, 1550 m, 15 Aug 1898, *A. Tonduz 12432* (Holotype B, presumably destroyed; Isotype US (photos MEXU, PTBG)).

Psychotria pittieri Standl., Contr. U.S. Natl. Herb. 18: 132. 1916. Type: PANAMA: Canal Zone, railroad relocation between Gorgona and Gatún, 10–50 m, 7 Jan 1911, *H. Pittier 2266* (Holotype US 676523 (photos MEXU, PTBG)).

Psychotria pittieri Standl. subsp. *oinochrophylla* Dwyer, Ann. Missouri Bot. Gard. 67: 416. 1980. Type: PANAMA: Darién, Cerro Pirre, cloud forest and/or mossy forest, 2500–4000 ft., 9–10 Aug 1967, *J. A. Duke & T. Elias 13668* (Holotype MO 2138646 (photos MEXU, PTBG)).—**Status uncertain, Psychotria** subgen. **Heteropsychotria**.

Psychotria platypoda DC., Prodr. 4: 510. 1830. Type: GUYANA: *Patris s.n.* (presumably G-DC, n.v.).

Psychotria pleuropoda Donn. Sm., Bot. Gaz. (Crawfordsville) 40: 5. 1905. Type:

GUATEMALA: Alta Verapaz, Cubliquitz, 350 m, Aug 1903, *H. von Tuerckheim 8529* (Lectotype GH, n.v. (fragment F; photos MEXU, PTBG); Isolectotype US (photos MEXU, PTBG); designated by Hamilton, 1989).

Psychotria poeppigiana Müll. Arg., Fl. Bras. 6(5): 370. 1881. Syntypes: BRAZIL: Amazonas Habitat in regione superiore fluminis Amazonum prope Ega, *Poeppig 3065* (presumably M, n.v.), *Martius s.n.* (presumably M, n.v.); in sylvis Japurensibus ad Maribi, *Martius s.n.* (presumably M, n.v.); in regione Rio Negro ad Uanaca et S. Gabriel, *Spruce 1892* (presumably M, n.v.); prope Barra do Rio Negro, *Martius s.n.* (presumably M, n.v.); in silvis ad Nagueria, *Martius s.n.* (presumably M, n.v.).

Psychotria polyphlebia Donn. Sm., Bot. Gaz. (Crawfordsville) 33: 253. 1902. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Apr 1896, *J. D. Smith 6854* (Lectotype US 943508 (photos MEXU, PTBG), here designated; Isolectotype US 943509 (photos MEXU, PTBG). Syntype: COSTA RICA: Talamanca, forêts au-dessus de Tsaki, 500 m, Apr 1895, *A. Tonduz 9577* (P (photos MEXU, PTBG)). *Smith 6854*, with abundant flowers and fruit and a duplicate at US, is the better choice for lectotype.

Psychotria psychotriifolia (Seem.) Standl., Contr. U.S. Natl. Herb. 18: 133. 1916. *Cephaëlis psychotriifolia* Seem., Bot. Voy. Herald 138. 1852 [as *psychotriaefolia*]. Type: PANAMA: Panamá, dense forests near Cruces; and Darién, Chirambira, *Seemann 482* (Holotype BM, n.v. (photo MO); Isotype K [as *Seemann 482bis*]).

Psychotria pubescens Sw., Prodr. Veg. Ind. Occ. 44. 1788. Type: JAMAICA: A neotype needs to be designated according to Howard (1989).

Psychotria pumilocarpa Dwyer, Ann. Missouri Bot. Gard. 67: 419. 1980. Type: PANAMA: Veraguas, Alto de Piedra, 800 m, 7 Sep 1974, *P. J. M. Maas & R. L. Dressler 1612* (Holotype MO 2287628).

Psychotria purpureocapitata Dwyer ex C. M. Taylor, Novon 6: 301, *fig. 2A, B.* 1996. Type: PANAMA: Coclé, El Copé on Pacific side, ½ hour walk from sawmill, 2400 ft. [774 m], 16 Oct 1979, *T. Antonio 2154* (Holotype PMA, n.v.; Isotype MO 4658112).

Psychotria purpusii Standl., Contr. U.S. Natl. Herb. 23: 1388. 1926. Type: MEXICO: Chiapas, Cerro del Boquerón, Aug 1913, *C. A. Purpus 7012* (Holotype US 567269 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), GH, n.v., MO (photos MEXU, PTBG)).

Psychotria quadrangulata Dwyer, Ann. Missouri Bot. Gard. 67: 1980. Type: PANAMA: Veraguas, NW. of Santa Fé, 2.7 km from Escuela Agrícola Alto de Piedras, road to Calovébora, *S. Mori & J. Kallunki 5363* (Holotype MO (not located 6/1996)).

Psychotria quiinifolia Dwyer, Ann. Missouri Bot. Gard. 53: 108. 1966. Type: PANAMA: Bocas del Toro, Almirante, Changuinola Canal, *K. Blum 1402* (Holotype MO 2448117 (photo PTBG)).—**Psychotria nervosa** Sw.

Psychotria quinqueradiata Pol., Linnaea 41: 570. 1877. Type: COSTA RICA: San José, 24 Jun 1875, *H. Polakowski 135* (Lectotype B, destroyed (photos BH, MO, US); designated by Hamilton, 1989). *Uragoga*

Psychotria racemosa Rich., Actes Soc. Hist. Nat. Paris 1: 107. 1792. Type: FRENCH GUIANA: *L. C. M. Richard s.n.* (Neotype P, n.v.; designated by Kirkbride, 1997).

Psychotria racemosa (Aubl.) Raeusch., Nomen., ed. 3, 56. 1797, not Rich. 1792. *Nonatelia racemosa* Aubl., Hist. Pl. Guiane 187, *t. 72.* 1775. Type: FRENCH GUIANA: In sylvis territorii Orapu, *Aublet s.n.* (Holotype P, n.v.). —**Psychotria racemosa** Rich.

Psychotria ramonensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1360. 1938. Type: COSTA RICA: La Palma de San Ramón, 1250 m, Nov 1925, *A. Brenes 4599* (Holotype F 852181 (photos MEXU, PTBG)). —**Psychotria hazenii** Standl.

Psychotria remota Benth., J. Bot. Hook. 3: 225. 1841. Type: BRAZIL: On the Rio Negro,

Schomburgk 963 (Holotype presumably K, n.v. (photo NY)). *Mapouria*

Psychotria roseocremea (Dwyer) C. M. Taylor, Novon 5: 205. 1995. *Coussarea roseocremea* Dwyer, Ann. Missouri Bot. Gard. 67: 133. 1980. Type: PANAMA: Panamá, El Llano-Cartí highway, 6–10 km N of El Llano, 13 Apr 1973, *R. L. Dressler 4334* (Holotype MO 2126258 (photo PTBG)).

Psychotria rosulatifolia Dwyer, Ann. Missouri Bot. Gard. 67: 423, *fig. 77*. 1980. Type: PANAMA: Darién, Cerro Tacarcuna, trail from Río Pucuro base camp up west ridge of Cerro Mali, 640–1000 m, 6 Feb 1975, *A. Gentry & S. Mori 14174* (Holotype MO 2276271 (photos MEXU, PTBG)).

Psychotria rufescens Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 364. 1819. Type: VENEZUELA: Caripe, *Humboldt & Bonpland s.n.* (Holotype presumably P-Bonpland, n.v.; Isotype B, presumably destroyed (photos F, MO)). *Uragoga*. —**Psychotria nervosa** Sw.

Psychotria rufescens Kunth var. *haenkeana* DC., Prodr. 4: 512. 1930. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Status uncertain**, probably **Psychotria nervosa** Sw.

Psychotria salicifolia (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 51. 1881. *Mapouria salicifolia* Oerst., Amér. Centr. 17, *tab. 14, fig. 2*. 1863. Not *Psychotria salicifolia* Kunth in Humb., Bonpl. & Kunth, 1819. Type: MEXICO: Oaxaca, Lacoba [Lacova], *F. Liebmann* (Holotype presumably C, n.v.). —**Psychotria papantlensis** (Oerst.) Hemsl.

Psychotria saltatrix C. M. Taylor, Novon 5: 205, *fig. 2*. 1995. Type: COSTA RICA: Cartago, Refugio Nacional Tapantí, por la orilla del Río Grande de Orosí, 09°45'N, 83°47'W, 14 Aug 1991, *B. Hammel et al. 18328* (Holotype CR, n.v.; Isotypes F, n.v., MO 4619859).

Psychotria sanfelicensis Dwyer, Ann. Missouri Bot. Gard. 67: 424. 1980. Type: PANAMA: Chiriquí, N of San Félix on Cerro Colorado copper mine road, along continental divide, 5000–5500 ft., *S. Mori & J. Kallunki 5871* (Holotype MO 3646500)

Psychotria santaritensis Dwyer, Ann. Missouri Bot. Gard. 424. *fig. 78*. 1980. Type: PANAMA: Colón, Santa Rita, near Agua Clara weather station, 23 Mar 1972, *J. D. Dwyer & A. Gentry 9565* (Holotype MO 2183828 (photos MEXU, PTBG)).

Psychotria santarosae Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 113. 1930. Type: COLOMBIA: El Valle, Santa Rosa, Dagua Valley, 200–300 m, 22 Sep 1922, *E. P. Killip 11530* (Holotype US 1140714).

Psychotria sarapiquensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1360. 1938. Type: COSTA RICA: Vara Blanca de Sarapiquí, north slope of Central Cordillera, 1500 m, Jul–Sep 1937, *A. F. Skutch 3330* (Holotype US 1643233 (photos F, MEXU, PTBG); Isotypes GH (photo PTBG), MO).

Psychotria scabriuscula Bartl. ex DC., Prodr. 4: 513. 1830. Type: MEXICO: Guerrero, Acapulco, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Psychotria pubescens** Sw.

Psychotria schippii Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 24. 1943. Type: BRITISH HONDURAS (BELIZE): El Cayo district, Valentin, in advanced forest, limestone valley, Jun–Jul 1936, *C. L. Lundell 6193* (Holotype F 861234 (photos MEXU, PTBG); Isotypes GH, n.v., NY, n.v., US (photo PTBG)).—**Psychotria mexiae** Standl.

Psychotria sessilifolia M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 228. 1844. Type: MEXICO: Veracruz, Mirador et Zacuapan [label on isotype states "Xalapa"], 3000 ft., *H. Galeotti 7078* (Holotype presumably BR, n.v.; Isotypes G-DEL, n.v. (photo MO), P (photos MEXU, PTBG)). *Uragoga*.—**Psychotria tenuifolia** Sw.

Psychotria siccorubra Dwyer, Ann. Missouri Bot. Gard. 67: 428. 1980. Type: PANAMA: Veraguas, Cerro Tute, ca. 10 km NW of Santa Fé, on ridgetop in cloud forest, above 1000 m, 19 Jun 1975, *S. Mori 6781* (Holotype MO 2272240 (photos MEXU, PTBG)). —**Psychotria ostreophora** (Werhnam) C. M. Taylor

Psychotria siggersiana Standl., J. Wash. Acad. Sci. 15: 289. 1925. Type: COSTA RICA: Limón, vicinity of Guápiles, 300–500 m, Mar 1924, *P. C. Standley 37210* (Holotype US 1153058 (photos MEXU, PTBG)).

Psychotria simiarum Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 344. 1929. Type: HONDURAS: Atlántida, Lancetilla Valley, near Tela, 20–600 m, 6 Dec 1927–20 Mar 1928, *P. C. Standley 56772* (Holotype F 581799 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Psychotria sixaolensis C. W. Ham., Phytologia 64: 234. 1988. Type: COSTA RICA: Limón, along road between Limón and Shiroles, along Río Sixaola, 0.9 miles SW of Bambu, 6.5 miles SW of Bribrú, less than 50 m alt., 12 Aug 1977, *T. B. Croat 43303* (Holotype MO 2587929 (photo PTBG)).

Psychotria skutchii Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 283. 1937. Type: GUATEMALA: San Juan Ixcoy, oak woods, 8000 ft., 22 Aug 1924, *A. F. Skutch 1074* (Holotype F 813469 (photos MEXU, PTBG); Isotype A, n.v.).—**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Psychotria solitudinum Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 207. 1940. Type: COSTA RICA: San José, Valley of El General, 700 m, Jun 1939, *A. F. Skutch 4347* (Holotype F 974021 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).

Psychotria sousae Lorence & Dwyer, Bol. Soc. Bot. México 47: 59. 1987. Type: MEXICO: Oaxaca, Mun. de Matías Romero, zona de Uxpanapa, lomas al E de Arroyo Hamaca, 9.5 km al SE de La Floresta, a 21.5 km S de Esmeralda, 400 m, 22 May 1981, *T. Wendt, A. Villalobos, I. Navarrete & J. Anguiano 3282* (Holotype MEXU; Isotypes CHAPA, PTBG).

Psychotria stenostachya Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 207. 1930. Type: PERU: Loreto, *Killip & Smith 29294* (Holotype F, n.v.).

Psychotria steyermarkii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 387. 1940. Type: GUATEMALA: Quezaltenango, lower south-facing slopes of Volcán Santa María, between Santa María de Jesús and Calahuaché, along great barranco between Finca Pireneos and San Juan Patzulín, 1300–1400 m, 6 Jan 1940, *J. A. Steyermark 33700* (Holotype F 1043219 (photos MEXU, PTBG)).

Psychotria stipulata (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 51. 1881. *Mapouria stipulata* Oerst., Amér. Cent. 17, *tab. 14, fig. 7*. 1863. Type: MEXICO: Veracruz, Papantla, *Liebmann 11615* (Lectotype C, here designated (photos MEXU, PTBG); Isolectotype C (photos MEXU, PTBG)). Syntype: MEXICO: Veracruz, Papantla, *Liebmann 11636* (C (photos MEXU, PTBG)). *Liebmann 11615*, a flowering specimen with a duplicate, is the more suitable choice for lectotype.—**Psychotria costivenia** Griseb. var. **costivenia**

Psychotria stockwellii C. W. Ham., Phytologia 64: 235. 1988. Type: COSTA RICA: Alajuela, region of Zarcero, 1800 m, 18 Oct 1937, *A. Smith 543* (Holotype US; Isotype F).

Psychotria subsessilis Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 32. 1853. Type: COSTA RICA: Ad Turrialba, *Oersted 11613* (Holotype C (photos MEXU, PTBG): Isotype US (photos MEXU, PTBG)).—**Psychotria costivenia** Griseb. var. **costivenia**

Psychotria suerrensis Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 337. 1899. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Feb–Apr 1896, *J. D. Smith 6580* (Syntype US 943504 (photos MEXU, PTBG), US 943405 (photos MEXU, PTBG)); *Tonduz 8683* (Syntype US, n.v.).

Psychotria sylvivaga Standl., J. Wash. Acad. Sci. 18: 274. 1928. Type: COSTA RICA: Heredia, Yerba Buena, northeast of San Isidro, ca. 2000 m, 28 Feb 1926, *P. C. Standley & J. Valerio 49989* (Holotype US 1306274 (photos MEXU, PTBG)).

Psychotria tacarcunensis Dwyer, Ann. Missouri Bot. Gard. 67: 431. 1980. Type: PANAMA: Darién, elfin forest at top of W peak of Cerro Tacarcuna massif, 1800–1850 m, 28 Jan 1975, *A. Gentry & S. Mori 13974*

(Holotype MO 2242943 (photos MEXU, PTBG)).

Psychotria tapantiensis C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 275. 1993. Type: COSTA RICA: Cartago, Reserva Tapantí, 11 km above the Tapantí bridge, 10 Aug 1980, *R. L. Wilbur 30741* (Holotype DUKE, n.v.).

Psychotria taurina Dwyer, Ann. Missouri Bot. Gard. 67: 432. 1980. Type: PANAMA: Bocas del Toro, Fish Creek Mountains, vicinity of Chiriquí Lagoon, 16 Apr 1941, *H. von Wedel 2240* (Holotype MO 1245978 (photos MEXU, PTBG)).

Psychotria tenuifolia Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: SANTO DOMINGO (Hispaniola): A neotype needs to be designated according to Howard (1989). *Uragoga*.

Psychotria thesceloantha Steyerm., Ann. Missouri Bot. Gard. 75: 347. 1988. Type: VENEZUELA: Amazonas, *R. Liesner 16963* (Holotype MO; Isotype VEN, n.v.).

Psychotria thornei Lorence, Novon 4: 127, *fig. 5*. 1994. Type: MEXICO: Chiapas, Selva Negra, ca. 15 km N of Pueblo Nuevo Solistahuacán; canyon with montane rain forest of Selva Negra on slopes, 5700 ft., 24 Jun 1970, *R. Thorne & E. Lathrop 40389b* (Holotype CAS (photo PTBG)).

Psychotria thyrsoidea Sessé & Moç., Fl. Mexic., ed. 2, 58. 1894. Type: MEXICO: Habitat prope Cordovam, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Psychotria tomentosa (Oerst.) Hemsl., Biol. Centr.-Amer., Bot. 2: 51. 1881. *Mapouria tomentosa* Oerst., Amér. Centr. 17, *tab. 14, fig. 8*. 1863. Not *Psychotria tomentosa* Müll. Arg., 1881, nor Hemsl., 1881. Type: MEXICO: Veracruz, prope Papantla, *F. Liebmann* (presumably C, n.v.).—**Status uncertain**, probably **Psychotria micrantha** Kunth in Humb., Bonpl. & Kunth.

Psychotria tonduzii Standl., J. Wash. Acad. Sci. 15: 287. 1925. Type: COSTA RICA : Cartago, La Estrella, 26–27 Mar 1924, *P. C. Standley 39461* (Holotype US 1153160 (photos MEXU, PTBG)).—**Psychotria aggregata** Standl.

Psychotria torresiana Standl., J. Wash. Acad. Sci. 15: 288. 1925. Type: COSTA RICA: Cartago, vicinity of Orosí, 30 Mar 1924, *P. C. Standley 39769* (Holotype US 1153178 (photos MEXU, PTBG)).—**Psychotria goldmanii** Standl.

Psychotria trichotoma M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 227. 1844. Type: MEXICO: Veracruz, Xalapa and Mirador, 4000 ft., *H. Galeotti 7092* (Holotype presumably BR, n.v.; Isotype P (photos MEXU, PTBG)). *Uragoga*.

Psychotria tricostata Standl., Ceiba 1: 48. 1950. Type: HONDURAS: Francisco Morazán, drainage of the Río Yeguare; cañón de la Mt. Uyuca, 2000 m, 29 May 1948, *A. Molino R. 919* (Holotype F 1352078 (photos MEXU, PTBG); Isotypes EAP, n.v., GH, n.v.). —**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Psychotria triphylla (DC.) Müll. Arg. in Mart., Fl. Bras. 6(5): 233. 1881. *Palicourea triphylla* DC., Prodr. 4: 526. 1830. Type: FRENCH GUIANA: Guiana Gallica, without precise locality, *Patris s.n.* (Holotype G-DC, n.v. (photo MO)).—**Palicourea triphylla** DC.

Psychotria turrubarensis W. C. Burger & Q. Jiménez, Novon 4: 206. 1994 [cited as nom. nud. in W. C. Burger & C. M. Taylor, Fieldiana: Bot., n.s. 33: 277. 1993]. Type: COSTA RICA: San José, faldas del Cerro Bares, Zona Protectora Cerros de Turrubares, 9°47'30"N, 84°28'30"W, 1600 m, 6 Nov 1990, *Q. Jiménez & G. Varela 935* (Holotype CR, n.v.; Isotypes F, n.v., MO).

Psychotria tutensis Dwyer, Ann. Missouri Bot. Gard. 67: 434. 1980. Type: PANAMA: Veraguas, Cerro Tute, ca. 10 km NW of Santa Fé, on ridgetop in cloud forest, above 1000 m, 19 Jun 1975, *S. Mori 6783* (Holotype MO 2338505 (photos MEXU, PTBG)). —**Coussarea austin-smithii** Standl.

Psychotria uliginosa Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: JAMAICA: A neotype needs to be designated according to Howard (1989). *Uragoga*.

Psychotria umbelliformis Dwyer & Hayden, Ann. Missouri Bot. Gard. 55: 44. 1968. Type: PANAMA: Panamá, between peaks of Cerro Trinidad, saddle on SE slope, 5 May 1968, *J. A. Duke & J. Kirkbride, Jr. 1641* (Holotype MO 1968366).

Psychotria uyucana Standl., Ceiba 1: 48. 1950. Type: HONDURAS: Francisco Morazán, drainage of Río Yeguare, Mt. Uyuca, 2000 m, 29 May 1948, *A. Molina R. 919* (Holotype F; Isotype EAP, n.v.).—**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Psychotria valeriana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1363. 1938. Type: COSTA RICA: Cerros de San Pedro de San Ramón, 1075 m, Jun 1926, *A. Brenes 4886* (Holotype F 853470 (photos MEXU, PTBG)).

Psychotria vallensis Dwyer, Ann. Missouri Bot. Gard. 67: 438. 1980. Type: PANAMA: Coclé, woods adjacent to chicken farm, La Mesa, above El Valle, 3 Jan 1974, *J. D. Dwyer 11867* (Lectotype MO 2163005A (photos MEXU, PTBG); Isolectotypes BM, n.v., F (photos MEXU, PTBG), GH, n.v., PMA, n.v.). The lectotype was designated by Hamilton (1989), selecting one of three sheets annotated by J. D. Dwyer as "type," and the two isolectotypes at MO were subsequently distributed to BM and PMA.—**Psychotria graciliflora** Benth. in Oerst.

Psychotria veracruzensis Lorence & Dwyer, Bol. Soc. Bot. México 47: 61. 1987. Type: MEXICO: Veracruz, Mun. de San Andrés Tuxtla, estación de biología tropical Los Tuxtlas, entre Sontecomapan y Montepío; vereda al Cerro Vigía, 150–250 m, 18 Apr 1981, *D. H. Lorence & T. P. Ramamoorthy 3313* (Holotype MEXU; Isotypes BM, F (photo PTBG), MEXU, MO (photo PTBG), UC, XAL).

Psychotria veraguensis Dwyer, Ann. Missouri Bot. Gard. 67: 438. 1980. Type: PANAMA: Veraguas, along road between Escuela Agrícola Alto Piedra (above Santa Fé) and Río Dos Bocas, ca. 10 km from the Escuela, 530–620 m, 26 Jul 1974, *T. B. Croat 25871* (Holotype MO 2204045 (photos MEXU, PTBG)).

Psychotria victoriae Dwyer, Ann. Missouri Bot. Gard. 53: 108. 1966. Not *P. victoriae* Standl., 1930. Type: PANAMA: Chiriquí, woods at Finca Collins, Boquete, 5000 ft., *M. V. Hayden 164* (Holotype MO (not located 6/1996)).—**Status uncertain, Psychotria macrophylla** Ruiz & Pav., vel sp. aff.

Psychotria viridis Ruiz & Pav., Fl. Peruv. 2: 61, *tab. 210, fig. b*. 1799. Type: PERU: Andes de Peru, Chinchao et Macora, Jul 1794, *Ruiz López & Pavón s.n.* (Holotype MA, n.v. (photo MO)). *Uragoga*.

Psychotria wendlandiana Oerst. ex Standl., J. Wash. Acad. Sci. 18: 9. 1928. Type: COSTA RICA: San Miguel [de Naranjo?], 13 May 1857, *Wendland 781* (Holotype C (photos MEXU, MO, PTBG); Isotype US (photos MEXU, PTBG)).—**Psychotria jimenezii** Standl.

Psychotria wilburiana Dwyer, Ann. Missouri Bot. Gard. 67: 440. 1980. Type: PANAMA: Veraguas, valley of the Río Dos Bocas, 11–13 km beyond Agricultural School at Santa Fé, 350–500 m, *T. B. Croat 25745* (Holotype MO 2232437 (photos MEXU, PTBG)).

Psychotria xerococcoides Dwyer, Ann. Missouri Bot. Gard. 67: 441. 1980. Type: PANAMA: Darién, Cerro Tacarcuna massif between summit camp on westernmost ridge and Pico Tacarcuna, mostly elfin forest, 1650–1800 m, 22 Jul 1976, *A. Gentry, H. Leon & L. Forero 16924* (Holotype MO 2465400 (photo PTBG); Isotype MO (photo PTBG)).

Psychotria yunckeri Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 397. 1938. Type: HONDURAS: Comayagua, in forest near the summit of the range above El Achote, above the plains of Siguatepeque 1850 m, Jun–Aug 1936, *T. G. Yuncker, R. F. Dawson & H. R. Youse 6013* (Holotype F 857686 (photos MEXU, PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG)).—**Psychotria panamensis** Standl. var. **panamensis**

Psychotria zevallosii C. M. Taylor, Monogr. Syst. Bot. Missouri Bot. Gard. 45: 1258. 1993. Nom. nov. for *Cephaëlis williamsii* Standl., Publ. Field Columbian Mus., Bot. Ser.

8: 185. 1930. Not *Psychotria williamsii* Standl., 1930. Type: PERU: Loreto, Manfina, on upper Río Nanay, 29 Jun 1929, *L. Williams 1114* (Holotype F 604625).

Rachicallis DC., Prodr. 4: 433. 1830. Type: Rachicallis rupestris (Sw.) DC.

Rachicallis americana (Jacq.) A. S. Hitchc., Missouri Bot. Gard. Ann. Rep. 4: 92. 1893. *Hedyotis americana* Jacq., Enum. Pl. Carib. 12. 1760. Type: CUBA: India Occidentalis, *Swartz s.n.* (location unknown).

Randia L., Sp. Pl. 2: 1192. 1753. Type: Randia mitis L. (=Randia aculeata L.).

Randia aculeata L., Sp. Pl. 2: 1192. 1753. var. **aculeata**. Type: JAMAICA: (LINN *214.1*, n.v.; for typification, see Howard, 1989: 452).

Randia aculeata L. var. *chiapasina* Loes., Verhandl. Bot. Ver. Brandenburg 65: 109. 1923. Type: MEXICO: Chiapas, Comitan, near Bahucuc, *E. Seler & C. Seler 2203* (Holotype B, presumably destroyed).—**Status uncertain**, probably **Randia aculeata** L. var. **aculeata**.

Randia aculeata L. var. **dasyclada** Steyerm., Mem. New York Bot. Gard. 23: 341. 1972. Based on *Randia obovata* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 409. 1820. Not *Randia obovata* Ruiz & Pav., 1799. Type: COLOMBIA: Dept. Córdoba, ad ostia flumiinis Sinu, *A. Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo F)).

Randia albonervia Brandegee, Zoë 5: 257. 1908. Type: MEXICO: Veracruz, vicinity of Zacuapan, Corral de las Piedras, May 1907, *C. A. Purpus 2424* (Holotype UC, n.v.; Isotypes BM, F (photos MEXU, PTBG), GH, n.v., US (photos MEXU, PTBG)).—**Randia monantha** Benth.

Randia altiscandens (Ducke) C. M. Taylor in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 282. 1993. *Basanacantha altiscandens* Ducke, Archiv. Inst. Biol. Veg. Rio Janeiro 2: 172. 1935. Type: VENEZUELA: Amazonas, *Ducke s.n.* (Holotype RB 24415, n.v.; Isotype NY, n.v.).

Randia armata (Sw.) DC., Prodr. 4: 387. 1830. subsp. **armata**. *Gardenia armata* Sw., Prodr. Fl. Ind. Occ. 51. 1788. Type: COLOMBIA: Cartagena, *Jacquin s.n.* (Lectotype: Jacquin's plate; designated by Taylor & Lorence, 1993).

Randia armata (Sw.) DC. subsp. **panamensis** (Standl.) Lorence, Novon 8: 250. 1998. *Randia panamensis* Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 288. 1929. Type: PANAMA: Prov. Bocas del Toro, region of Almirante, Flat Rock, Jan–Mar 1928, *G. Proctor Cooper 213* (Holotype F 579675 (photos MEXU, PTBG)).

Randia blepharodes Standl., Contr. U.S. Natl. Herb. 23: 1378. 1926. Type: MEXICO: Guerrero, Mexcala, versant oriental, terre chaude, 500 m, 23 May 1899, *E. Langlassé 1033* (Holotype US 386343 (photos MEXU, PTBG); Isotypes B, presumably destroyed (fragment F), F, GH, n.v., K, P (2 sheets; photos MEXU, PTBG)).—**Randia thurberi** S. Watson

Randia blepharophylla Standl., Contr. U.S. Natl. Herb. 23: 1375. 1926. Type: MEXICO: Nayarit, foothills of Sierra Madre, Tepic, between Aguacates and Dolores, *J. N. Rose 2028* (Holotype US 300921 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), GH, n.v.).—**Glossostipula blepharophylla** (Standl.) Lorence

Randia brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1365. 1938. Type: COSTA RICA: La Palma de San Ramón, 10 Mar 1932, *Brenes 15048* (Holotype F 857063 (photos MEXU, PTBG)).

Randia calycosa Standl., Contr. U.S. Natl. Herb. 20: 201. 1919. Type: PANAMA: Chiriquí, Los Siguas Camp, southern slope of Cerro de la Horqueta, 1700 m, 17–19 Mar 1911, *H. Pittier 3198* (Holotype US 677593 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).

Randia canescens Greenm., Proc. Amer. Acad. Arts 34: 573. 1899. Type: MEXICO: Morelos, barrancas near Cuernavaca, 5000 ft., 28 May 1898, *C. G. Pringle 6863* (Holotype GH, n.v.; Isotypes F (photos MEXU, PTBG), MEXU (2 sheets), MO (photos MEXU, PTBG), P (2

sheets; photos MEXU, PTBG), US (2 sheets; photos MEXU, PTBG)).

Randia capitata DC., Prodr. 4: 387. 1830. Type: MEXICO: Mexico ad Anasteca [Huasteca], May 1827, *Berlandier 513* (Holotype G-DC, n.v. (photos F, MEXU)).

Randia chiapensis Standl., Contr. U.S. Natl. Herb. 23: 1377. 1926. Type: MEXICO: Chiapas, Canjob, 27 Mar 1904, *E. A. Goldman 797* (Holotype US 470602 (photos K, MEXU, PTBG)).

Randia cinerea (Fernald) Standl., Contr. U.S. Natl. Herb. 20: 201. 1919. *Genipa cinerea* Fernald, Proc. Amer. Acad. Arts. 33: 93. 1897. Type: MEXICO: Guerrero, Acapulco and vicinity, Oct 1894–Mar 1895, *E. Palmer 348* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).

Randia concinna Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 288. 1929. Type: MEXICO: Jalisco, San Sebastian, Hacienda del Ocotal, 1500 m, *Y. Mexia 1690* (Holotype F 579911 (photos MEXU, PTBG); Isotypes A, n.v., BM, GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Glossostipula concinna** (Standl.) Lorence

Randia cookii Standl., Contr. U.S. Natl. Herb. 32: 176. 1934. Type: GUATEMALA: Baja Verapaz, Santa Rosa, June 1904, *O. F. Cook 249* (Holotype US 860099 (photos MEXU, PTBG), fragment F).

Randia crescentioides Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 88. 1944. Type: COSTA RICA: Port Parker, 4 Jul 1932, *J. T. Howell s.n.* (Holotype CAS, n.v., fragment F (photos MEXU, PTBG)).—**Randia thurberi** S. Watson

Randia echinocarpa Sessé & Moc. ex DC., Prodr. 4: 385. 1830. Type: MEXICO: *Fl. Mexic. Ic. 469* (calque presumbably MA, n.v., G-DC, n.v. (copies MEXU, US)). *Basanacantha, Genipa*.

Randia ehrenbergii Standl., Contr. U.S. Natl. Herb. 32: 167. 1934. Type: MEXICO: Veracruz, Plan de Amilpas, Mar 1831, *C. Ehrenberg 575* (Holotype B, presumably destroyed).—**Randia capitata** DC.

Randia formosa (Jacq.) K. Schum. in Mart., Fl. Bras. 6(6): 342. 1889. *Mussaënda formosa* Jacq., Enum. Pl. Carib. 16. 1760. Type: COLOMBIA: Cartagena, *Jacquin s.n.* (Holotype G, n.v.).—**Rosenbergiodendron formosum** (Jacq.) F. Fagerl.

Randia gaumeri Greenm. & C. H. Thomps., Ann. Missouri Bot. Gard. 1: 410. 1915. Type: MEXICO: Yucatán, Izamal, 1895, *G. F. Gaumer 589* (Holotype MO 951695 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Randia obcordata** S. Watson

Randia genipifolia (Standl. & Steyerm.) Lorence, Novon 8: 249. 1998. *Duroia genipifolia* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 186. 1940. Type: GUATEMALA: Izabal, Río Dulce, between Livingston and 6 miles up river, on north side (right side going up river), sea level, 14 Apr 1940, *J. A. Steyermark 39382* (Holotype F 1035218 (photo PTBG)).

Randia genipoides Dwyer in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 284. 1993. Type: COSTA RICA: Alajuela, Upala, *G. Herrera 1129* (Holotype CR, n.v.; Isotypes F, n.v., MO).

Randia gentlei Lundell, Wrightia 4: 125. 1969. Type: BRITISH HONDURAS (BELIZE): Toledo Distr., Edwards Rd. beyond Columbia, 24 May 1951, *P. H. Gentle 7343* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, TEX-LL (2 sheets), US (photos MEXU, PTBG)).—**Randia genipifolia** (Standl. & Steyerm.) Lorence

Randia gentryi Dwyer, Ann. Missouri Bot. Gard. 67: 447. 1980. Type: PANAMA: Prov. Darién, top of Cerro Mali, 1300–1420 m, *A. H. Gentry & S. Mori 13629* (Holotype MO 2258315 (photos MEXU, PTBG); Isotype MO 2578524 (photo PTBG)).

Randia grandifolia (Donn. Sm.) Standl., J. Wash. Acad. Sci. 18: 166. 1928. *Basanacantha grandifolia* Donn. Sm., Bot. Gaz. (Crawfordsville) 55: 436. 1913. Type: COSTA RICA: Forêts de Santo Domingo de Golfo Dulce, Feb 1896, *A. Tonduz 9878*

(Lectotype US 941393, here designated (photos MEXU, PTBG); Isolectotypes F (photos MEXU, PTBG), US 577282). Syntype: COSTA RICA: Bords du Río Corozal, près Santo Domingo de Golfo Dulce, Apr 1896, *A. Tonduz 9982* (US, F (photos MEXU, PTBG)). *Tonduz 9878*, with more abundant flowers and two duplicates, represents the better choice for lectotype.

Randia grayumii Dwyer & Lorence in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 285. 1993. Type: COSTA RICA: Limón, behind NAISA house, Gandoca, 9°36'N, 82°37'W, 3 m, 4 May 1985, *M. H. Grayum & G. Schatz 5287* (Holotype MO 3648263 (photo PTBG); Isotype ?CR, n.v.).

Randia guatemalensis Standl., Contr. U.S. Natl. Herb. 20: 202. 1919. Type: GUATEMALA: Alta Verapaz, Secanquím, 550 m, 6 May 1905, *H. Pittier 271* (Holotype US 472930 (photos MEXU, PTBG)).—**Randia aculeata** L. var. **aculeata**

Randia guerrerensis Lorence & Rodr. Acosta, Biotica 11: 195, *fig. 1*. 1986. Type: MEXICO: Guerrero, Mun. de Coyuca de Benítez, camino de El Zapote a Hacienda de Cabañas, a 10 km al SO de la alberca El Dorado, cerca de la Laguna de Mitla, 7 m, 21 Jul 1984, *M. Rodríguez Acosta sub Lorence 4584* (Holotype MEXU; Isotypes ENCB, MO (photo PTBG)).

Randia habrophlebia Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 25. 1943. Type: GUATEMALA: Jutiapa, Valley of Jutiapa, 850 m, 24 Oct–6 Nov 1940, *P. C. Standley 76321* (Holotype F 1091237 (photos MEXU, PTBG)).—**Randia cinerea** (Fernald) Standl.

Randia hidalgensis Lorence, Bol. Soc. Bot. México 47: 38, *fig. 1a, b*. 1987. Type: MEXICO: Querétaro, Mun. de Arroyo Seco, 12 km NW de El Trapiche, camino a Río Verde, a 1 km SE de Puerto de Ayutla, 1200 m, 29 Abr 1982, *P. Tenorio & R. Hernández M. 297* (Holotype MEXU; Isotype MO (photo PTBG)).

Randia hondensis Karsten, Linnaea 30: 154. 1859. Type: COLOMBIA: Valley of Río Magdalena, 260 m, *H. Karsten s.n.* (Holotype B, presumably destroyed).

Randia induta Standl., Contr. U.S. Natl. Herb. 23: 1377. 1926. Type: MEXICO: Guerrero, Cayacol, 12 Apr 1903, *E. W. Nelson 7018* (Holotype US 399362 (photos MEXU, PTBG)).

Randia inermis Sessé & Moç., Fl. Mexic. 54. 1891. Not *Randia inermis* (Ducke) Ducke, 1932. Type: MEXICO: Habitat in Amatitani clivo, ubi Testiculus Taurinus ob Fructus. Figuram vulgo adpellatur. Florit Maio, *Sessé & Moçiño s.n.* (presumably MA, n.v.). —**Status uncertain.**

Randia karstenii Pol., Linnaea 41: 568. 1877. Syntypes: COSTA RICA: In sepibus vivis prope San José, Jun & Sep 1875, *H. Karsten 74* (B, presumably destroyed); *Karsten 302* (B, presumably destroyed, BM, n.v.). —**Randia aculeata** L. var. **aculeata**

Randia laetevirens Standl., Contr. U.S. Natl. Herb. 23: 1377. 1926. Type: MEXICO: Nuevo León, Monterrey, Cerro la Silla, 20 Mar 1902, *E. W. Nelson 6083* (Holotype US 347312 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).

Randia laevigata Standl., Contr. U.S. Natl. Herb. 20: 201. 1919. Type: MEXICO: Sonora, Sierra de Alamos, 18 Mar 1910, *J. N. Rose, P. C. Standley & P. G. Russell 13051* (Holotype US 635870 (photos MEXU, PTBG)).

Randia lasiantha (Standl.) Standl., Contr. U.S. Natl. Herb. 20: 201. 1919. *Basanacantha lasiantha* Standl., Contr. U.S. Natl. Herb. 18: 134. 1916. Type: PANAMA: Panamá, Alajuela, Chagres Valley, 30–100 m, *H. Pittier 3473* (Holotype US 678517 (photos MEXU, PTBG)).

Randia latifolia Lam. var. *micrantha* Schltdl., Linnaea 6: 723. 1831. Type: MEXICO: Veracruz, prope Jalapam, *Schiede & Deppe 276* (Holotype presumably HAL, n.v.). —**Randia aculeata** L. var. **aculeata**

Randia letreroana Lundell, Wrightia 4: 126. 1969. Type: MEXICO: Chiapas, Letrero, near Siltepec, 2000 m, 6 Jul 1941, *E. Matuda 4358* (Holotype TEX-LL, n.v.; Isotypes F (photo

PTBG), MEXU, MO (photo PTBG)).—**Randia thurberi** S. Watson

Randia longiloba Hemsl., Biol. Centr.-Amer., Bot. 4: 101. 1887. Type: MEXICO: Yucatán, Cozumel Island, *Gaumer s.n.* (Holotype presumably K, n.v.).

Randia loniceroides Dwyer & Lorence, Bol. Soc. Bot. México 47: 40, *fig. 1c, d.* 1987 [as *lonicerioides*]. Type: MEXICO: Veracruz, Mun. de Minatitlán, Zona de Uxpanapa, 13.7 km E. de La Laguna sobre camino a Uxpanapa, luego 8 km N sobre camino a Belisario Domínguez, 17°21'N, 94°23'W, 130 m, 19 Apr 1981, *T. Wendt & E. Lott 3207* (Holotype MEXU; Isotypes CHAPA, ENCB).

Randia lundelliana Standl. in Lundell, Contr. Univ. Michigan Herb. 4: 30. 1940. Type: BRITISH HONDURAS (BELIZE): El Cayo Distrist, Vaca, 26 Apr 1938, *P. H. Gentle 2524* (Holotype F 941519 (photo PTBG); Isotype TEX-LL).—**Randia monantha** Benth.

Randia malacocarpa Standl., Contr. U.S. Natl. Herb. 20: 202. 1919. Type: MEXICO: Nayarit, near Acaponeta, Tepic, 30 Jul 1897, *J. N. Rose 3298* (Holotype US 302274 (photos MEXU, PTBG, US)).

Randia matudae Lorence & Dwyer, Bol. Soc. Bot. México 47: 42. 1987. Based on *Casasia chiapensis* Miranda, Ceiba 4: 142, *fig. p. 144.* 1954. Not *Randia chiapensis* Standl., 1926. Type: MEXICO: Chiapas, Rancho el Ocote, 30 km NW de Ocozocuautla, 650 m, 21 May 1950, *F. Miranda 7734* (Lectotype MEXU; designated by Lorence & Dwyer, 1987). Syntype: MEXICO: Chiapas, same locality, *F. Miranda 6224* (F (photo PTBG)).

Randia mayana Lundell, Wrightia 5: 322. 1976. Type: GUATEMALA: Baja Verapaz, Niño Perdido, in high forest on top of hill, E. of km 150/151, 30 Aug 1975, *C. L. Lundell & E. Contreras 19758* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MO (photo PTBG), TEX-LL (photos MEXU, PTBG)).

Randia megacarpa Brandegee, Zoë 5: 257. 1908. Type: MEXICO: Baja California, Comondu, 2 Feb 1889, *T. S. Brandegee s.n.* (Holotype UC, n.v.).—**Randia capitata** DC.

Randia megalocarpa Dwyer, Ann. Missouri Bot. Gard. 67: 449. 1980. Type: PANAMA: Panamá, Cerro Peñon, 3 km S of Alcade Díaz, vicinity of television tower on Continental Divide, 350–440 m, *M. Nee 8865* (Holotype MO 2208620 (photo PTBG); Isotype MO 2208621 (photo PTBG)).—**Randia lasiantha** (Standl.) Standl.

Randia microcarpa Sessé & Moç., Pl. Nov. Hispan. 33. 1888 (La Naturaleza ser. 2, 1: app. 33. 1888) [as *microcarpus*]. Type: MEXICO: Habitat in montibus Haereditatis-Ahuesuyo, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Randia millspaughiana S. F. Blake, Proc. Biol. Soc. Wash. 34: 45. 1921. Type: MEXICO: Yucatán, Maxacanu, Mar 1916, *G. F. Gaumer et al. 23260* (Holotype F 446691 (photos MEXU, PTBG); Isotypes GH, n.v., US (photos MEXU, PTBG)).—**Randia longiloba** Hemsl.

Randia mira Dwyer, Ann. Missouri Bot. Gard. 67: 450. 1980. Type: PANAMA: Panamá, 5–10 km NE of Altos de Pacora at end of road, 6 Mar 1975, *S. Mori & J. Kallunki 4953* (Holotype MO 2247822 (photos MEXU, PTBG); Isotype MO (photos MEXU, PTBG)).

Randia mitis L., Sp. Pl. 2: 1192. 1753. Type: Habitat in Jamaica. Lectotype: *Lycium majus americanum, jasmini flore, foliis subrotundis lucitus*, Plukenet, Phytographica, *t. 97, fig. 6.* 1691. (designated by Lorence in Jarvis et al., 1993: 80).—**Randia aculeata** L. var. **aculeata**

Randia mollifolia Standl., Field Mus. Nat. Hist., Bot. Ser. 17: 219. 1937. Type: MEXICO: Sonora, Saguaribo, Río Mayo, 3 Nov 1935, *H. S. Gentry 2139* (Holotype F 809526 (photos MEXU, PTBG); Isotypes GH, n.v., MEXU, US (photos MEXU, PTBG), WIS).

Randia monantha Benth., Pl. Hartweg. 84. 1841. Type: GUATEMALA: Río de los Esclavos, *T. Hartweg 582* (Holotype K (photos F, MEXU); Isotypes B, presumably

destroyed (photo MO), BM, P [label states "Mexique"] photos MEXU, PTBG)).

Randia montana L. O. Williams, Phytologia 24: 160. 1972. Type: HONDURAS, Intibucá, Cordillera Opalaca, between Calaveras and El Duraznillo, 1800 m, 12 Mar 1970, *A. Molina R. & A. R. Molina 25550* (Holotype F 1695297 (photos MEXU, PTBG); Isotype EAP, n.v.).—**Randia aculeata** L. var. **aculeata**

Randia nelsonii Greenm., Proc. Amer. Acad. Arts 34: 574. 1899. Type: MEXICO: Oaxaca, Juchitán to Chivela, 150–900 ft., 1895, *E. W. Nelson 2635* (Holotype GH, n.v.; Isotype US 569319 (photos MEXU, PTBG)).—**Randia thurberi** S. Watson

Randia nicaraguensis Lorence & Dwyer, Novon 8: 247, *fig. 1*. 1998. Type: NICARAGUA: Estelí, 4.9–7.6 km NE of Hwy. 1 at Estelí along road to Yalí, ca. 13°08–09', 86°19–20'W, 1100 m, 14 Nov 1979, *W. D. Stevens & A. Grijalva 15553* (Holotype MO 2872306; Isotypes F, HNMN, MEXU, MO).

Randia oaxacana Standl., Contr. U.S. Natl. Herb. 32(3): 165. 1934. Type: MEXICO: Oaxaca, Choapam [=Santiago Choapan], 2800–1500 ft., 28–29 Jul 1894, *E. W. Nelson 842* (Holotype F 599712 (photos MEXU, PTBG)).

Randia obcordata S. Watson, Proc. Amer. Acad. Arts 24: 53. 1889. Type: MEXICO: Sonora, Guaymas, 1887, *E. Palmer 648* (Holotype US 47988 (photos MEXU, PTBG); Isotype BM).

Randia obovata Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 409. 1820. Not *Randia obovata* Ruiz & Pav., 1799. Type: COLOMBIA: Ad ostia fluminis Sinu, *A. Bonpland s.n.* (Holotype P-Bonpland, n.v.).—**Randia aculeata** L. var. **dasyclada** Steyerm.

Randia panamensis Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 288. 1929. Type: PANAMA: Prov. Bocas del Toro, region of Almirante, Flat Rock, Jan–Mar 1928, *G. Proctor Cooper 213* (Holotype F 579675 (photos MEXU, PTBG)).—**Randia armata** (Sw.) DC. subsp. **panamensis** (Standl.) Lorence

Randia pepoformis Dwyer, Ann. Missouri Bot. Gard. 67: 451. 1980. Type: PANAMA: Darién, trail from Tacarcuna Village on Río Tacarcuna to Cerro Mali, 800–1300 m, 16 Jan 1975, *A. H. Gentry & S. Mori 13614* (Holotype MO 2248019 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), MO (photos MEXU, PTBG)).—**Randia altiscandens** (Ducke) C. M. Taylor

Randia petenensis Lundell, Wrightia 4: 127. 1969. Type: GUATEMALA: Petén, La Cumbre, about 5 km from the village, on Pusila River Road, 17 May 1967, *E. Contreras 6941* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, US (photos MEXU, PTBG)).

Randia pittieri (Standl.) Standl., Contr. U.S. Natl. Herb. 20: 201. 1919. *Basanacantha pittieri* Standl., Contr. U.S. Natl. Herb. 18: 134. 1916. Type: COSTA RICA: Gent Junction, près Matina, Feb 1900, *H. Pittier 16036* (Holotype US 578473 (photos K, MEXU, PTBG); Isotype P (fragment F, photos MEXU, PTBG)).

Randia pleiomeris Standl., Contr. U.S. Natl. Herb. 20: 202. 1919. Type: GUATEMALA: Santa Rosa, Santa Rosa, 3000 ft., May 1892, *Heyde & Lux 3166* (Lectotype US 888490, here designated [left- and right-hand collections only; the center collection is *R. cookii*]; Isolectotype GH, n.v.).—**Randia thurberi** S. Watson

Randia pringlei (S. Watson) A. Gray, Proc. Amer. Acad. Arts 21: 379. 1886. *Basanacantha pringlei* S. Watson, Proc. Amer. Acad. Arts 18: 98. 1883. Type: MEXICO: Coahuila, Mountains, Jimulco, 9 Apr 1885, *C. G. Pringle 142* (Holotype GH, n.v.; Isotypes A, n.v., BM, F (photos MEXU, PTBG), MEXU, P (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Randia pterocarpa Lorence & Dwyer, Bol. Soc. Bot. México 47: 43, *fig. 2*. 1987. Type: MEXICO: Veracruz, Mun. San Andrés Tuxtla, Estación de Biología Tropical Los Tuxtlas, jardín botánico, 95°04–09'W,

18°34–36'N, 160 m, 6 Dec 1983, *G. Ibarra M. 1109* (Holotype MEXU; Isotypes BM, F, MO, XAL).

Randia purpusii Greenm. & C. H. Thomps., Ann. Missouri Bot. Gard. 1: 410. 1914. Type: MEXICO: San Luis Potosí, Minas de San Rafael, May 1911, *C. A. Purpus 5208* (Holotype MO 4186182 (photos MEXU, PTBG); Isotypes F, (photos MEXU, PTBG), GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Randia capitata** DC.

Randia retroflexa Lorence & M. Nee, Brittonia 39: 371, *fig. 1*. 1987. Type: MEXICO: Veracruz, Mun. de Hidalgotitlán, Campamento Hermanos Cedillo a 4 km de Pancho Villa, 150 m, 25 Mar 1975, *B. Ortíz & J. Martiniano A. 56* (Holotype MEXU; Isotypes BM, BR, ENCB, F (photo PTBG), MO (photo PTBG), NY, UC, XAL).

Randia rhagocarpa Standl., Contr. U.S. Natl. Herb. 23: 1376. 1926. Type: MEXICO: Tamaulipas, vicinity of Victoria, 320 m, 1 Feb–9 Apr 1907, *E. Palmer 38* (Holotype US 572266 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), GH, n.v., MO (photos MEXU, PTBG)).—**Randia obcordata** S. Watson

Randia rosei Standl., Contr. U.S. Natl. Herb. 20: 203. 1919. Type: MEXICO: Sinaloa, Rosario, 7 Jul 1897, *J. N. Rose 1551* (Holotype US 300395 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG), GH, n.v.).—**Randia thurberi** S. Watson

Randia sonorensis Wiggins, Contr. Dudley Herb. 3: 75, *pl. 19, figs. 4–6*. 1940. Type: MEXICO: Sonora, granitic hillside 12 miles E of Ures on road to Babiacora, 2760 ft., 20 Sep 1934, *I. L. Wiggins 7360* (Holotype DS 263358, n.v.; Isotype US (photos MEXU, PTBG)).

Randia standleyana L. O. Williams, Phytologia 24: 162. 1972. Type: GUATEMALA: Petén, La Libertad, 29 May 1933, *C. L. Lundell 3474* (Holotype F 692287 (photos MEXU, PTBG); Isotype MICH, n.v.).

Randia subcordata (Standl.) Standl., Contr. U.S. Natl. Herb. 20: 201. 1919. *Basanacantha subcordata* Standl., Contr. U.S. Natl. Herb. 18: 133. 1916. Type: COSTA RICA: Buissons et bois des chemins á Nicoya, May 1900, *A. Tonduz 13934* (Holotype US 861251 (photos MEXU, PTBG); Isotypes B, destroyed (fragment F, photos MEXU, PTBG), GH, n.v., LE, n.v. (fragment F, photo PTBG), P (photos MEXU, PTBG), fragment F (photos MEXU, PTBG)).—**Randia monantha** Benth.

Randia tetracantha (Cav.) DC., Prodr. 4: 387. 1830. *Mussaenda tetracantha* Cav., Icon. Pl. 4: 20, *pl. 435*. 1799. Type: MEXICO: [Probably Guerrero], cerca Acapulco, *Née s.n.* (Holotype MA, n.v. (photos F, MEXU, MO)). *Basanacantha*.

Randia tetracantha Sessé & Moç., Pl. Nov. Hispan. 33. 1888 (La Naturaleza ser. 2, 1: app. 33. 1888). Not *Randia tetracantha* (Cav.) DC., 1830. Type: MEXICO: Habitat in montibus Haereditatis-Ahuesuyo, fl. Dec, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Randia tetramera Loes., Verhandl. Bot. Ver. Brandenburg 65: 109. 1923. Type: MEXICO: Yucatán, Xkombec and Uxmal, *E. Seler & C. Seler 4035* (Syntype B, presumably destroyed, GH, n.v.); *E. Seler & C. Seler 5559a* (Syntype B, presumably destroyed).—**Randia truncata** Greenm. & C. H. Thomps.

Randia texensis Lundell, Field & Lab. 13: 22. 1945. Type: U.S.A.: Texas, Cameron County, about 5 miles north of Brownsville off Point Isabel road, 21 Sep 1943, *C. L. Lundell & A. A. Lundell 12456* (Holotype SMU, n.v.).—**Randia obcordata** S. Watson

Randia thurberi S. Watson, Proc. Amer. Acad. Arts 24: 53. 1889. Type: MEXICO: Sonora, Guayamas, 1887, *Thurber in E. Palmer 229* (Holotype US 1393134 (photos MEXU, PTBG); Isotypes BM, US).

Randia tomatillo Loes., Rep. Spec. Nov. 18: 360. 1922. Type: MEXICO: Veracruz, Puerto de Alvarado, and Isla de Sacrificios, *E. Seler & C. Seler 4498* (Lectotype US 1205748, here designated; Isolectotypes B, destroyed; GH, n.v.). Same locality, *E. Seler & C. Seler 5433* (Syntype B, destroyed). The US collection of *Seler & Seler 4498* is a good fruiting

specimen and the best choice for lectotype.—**Randia aculeata** L. var. **dasyclada** Steyerm.

Randia tomentosa S. Watson, Proc. Amer. Acad. Arts 25: 152. 1890. Not *Randia tomentosa* Wight & Arn., 1834, nor *R. tomentosa* Hook., 1880. Type: MEXICO: Nuevo León, Sierra de la Silla, near Monterrey, Aug 1889, *C. G. Pringle 2865* (Holotype GH, n. v.).—**Randia capitata** DC.

Randia truncata Greenm. & C. H. Thomps., Ann. Missouri Bot. Gard. 1: 411. 1914. Type: MEXICO: Yucatán, vicinity of Izamal, 1895, *G. F. Gaumer 713* (Holotype MO 46009 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Randia vazquezii Lorence & Dwyer, Bol. Soc. Bot. México 47: 46, *fig. 3*. 1987. Type: MEXICO: Veracruz, Mun. de Jesús Carranza, Zona de Uxpanapa, 2 km N del Poblado 2, Ejido F. J. Mina, 17°16'N, 94°40'W, 120 m, 23 May 1982, *M. Vázquez T. & I. Navarrete 2520* (Holotype MEXU; Isotypes CHAPA, PTBG).

Randia watsonii B. L. Rob., Proc. Amer. Acad. Arts 29: 317. 1894 [as *watsoni*]. Based on *Randia tomentosa* S. Watson, Proc. Amer. Acad. Arts 25: 152. 1890. Not *Randia tomentosa* Wight & Arn., 1834, nor *R. tomentosa* Hook., 1880. Type: MEXICO: Nuevo León, Sierra de la Silla, near Monterrey, Aug 1889, *C. G. Pringle 2865* (Holotype GH, n.v.).—**Randia capitata** DC.

Randia xalapensis M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 239. 1844. Type: MEXICO: Veracruz, Xalapa, Cordillera, Jun–Oct 1840, *H. Galeotti 7116* (Holotype BR, n.v.; Isotypes GH (label states "*Galeotti s.n.*"), P (photos MEXU, PTBG)).

Raritebe Wernham, J. Bot. 55: 336. 1917. Type: Raritebe palicoureoides Wernham

Raritebe blumii (Dwyer) Dwyer, Ann. Missouri Bot. Gard. 67: 452. 1980. *Dukea blumii* Dwyer, Ann. Missouri Bot. Gard. 53: 365. 1966. Type: PANAMA: Colón, around Dos Bocas, Río Fató valley, 40–80 m, 16 Aug 1911, *H. Pittier 4223* (Holotype MO 1227470 (photo PTBG)).—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Raritebe dariensis (Dwyer) Dwyer, Ann. Missouri Bot. Gard. 67: 453. 1980. *Dukea dariensis* Dwyer, Ann. Missouri Bot. Gard. 53: 365. 1966. Type: PANAMA: Darién, Chepigana District, Cana–Cuasí Trail (Camp 2), 10 Mar 1940, *M. E. Terry & R. A. Terry 14871* (Holotype MO 1196543 (photo PTBG)).—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Raritebe euryphyllum (Standl.) Dwyer, Ann. Missouri Bot. Gard. 67: 453. 1980. *Coussarea euryphylla* Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 294. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp on Chiriquí Trail, 375 m, 1928, *G. P. Cooper 228* (Holotype F 579282, n.v.). —**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Raritebe palicoureoides Wernham subsp. **dwyerianum** J. H. Kirkbr., Brittonia 31: 304. 1979. Type: PANAMA: Panamá, on trail to Cerro Campana, 23 Aug 1967, *J. H. Kirkbride, Jr. & S. M. V. Hayden 273* (Holotype MO 1917794 (photos MO, PTBG); Isotypes F, MO (photo PTBG)).

Raritebe panamensis (Dwyer) Dwyer, Ann. Missouri Bot. Gard. 67: 454. 1980. *Dukea panamensis* Dwyer, Ann. Missouri Bot. Gard. 53: 364. 1966. Type: PANAMA: Panamá, Cerro Jefe in Clusia rain forest, 3000 ft., *E. L. Tyson, J. Dwyer & K. Blum 3326* (Holotype MO 2084467 (photo PTBG)).—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Raritebe trifoliatum (Dwyer & Hayden) Dwyer, Ann. Missouri Bot. Gard. 67: 455. 1980. *Dukea trifoliata* Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 139. 1967. Type: PANAMA: Coclé, El Valle, potato farm above village of El Valle, 12 Jul 1962, *J. D. Dwyer 1933* (Holotype MO 3831231 (photo PTBG)).—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Raritebe victoriae (Dwyer) Dwyer, Ann. Missouri Bot. Gard. 67: 456. 1980. *Dukea*

victoriae Dwyer, Ann. Missouri Bot. Gard. 53: 364. 1966. Type: PANAMA: Darién, cloud forest, Cerro Pirre, Oct 1962, *J. A. Duke 6099* (Holotype MO 1832075 (photo PTBG); Isotype MO (photo PTBG)).—**Raritebe palicoureoides** Wernham subsp. **dwyerianum** J. H. Kirkbr.

Raritebe viburnioides Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 56. 1930. Type: COLOMBIA: Cauca, La Gallera, Micay Valley, 1 Jul 1922, *Killip 7934* (Holotype US, n.v.; fragment F, n.v.; Isotypes G, n.v., NY, n.v.).—**Bertiera viburnoides** (Standl.) J. H. Kirkbr.

Ravnia Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 49. 1853. Type: Ravnia triflora Oerst. [Herein treated as a synonym of *Hillia* Jacq. subg. *Ravnia* (Oerst.) C. M. Taylor.]

Ravnia longifilamentosa Steyerm., Ceiba 3: 21. 1952. Type: PANAMA: Chiriquí, upper forested southern slopes of Quebrada Velo, vicinity of Finca Lérida, 5000 ft., 25 Jul 1947, *P. H. Allen 4744* (Holotype F 1394241 (photo PTBG); Isotype MO, n.v.).—**Hillia longifilamentosa** (Steyerm.) C. M. Taylor

Ravnia panamensis Steyerm., Ceiba 3: 22. 1952. Not *Hillia panamensis* Standl., 1921. Type: PANAMA: Coclé, North Hills, El Valle de Antón, 29 Jun 1946, *P. H. Allen 3558* [collector erroneously omitted in protologue] (Holotype F 1394242 (photo PTBG); Isotype MO, n.v.).—**Hillia allenii** C. M. Taylor

Ravnia pittieri Standl., N. Amer. Fl. 32: 114. 1921. Type: COSTA RICA: Santa Clara, Jul 1899, *H. Pittier 13461* (Holotype NY, n.v.).—**Hillia triflora** (Oerst.) C. M. Taylor var. **pittieri** (Standl.) C. M. Taylor

Ravnia triflora Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 50. 1853. Type: COSTA RICA: Near Cartago and Candelaria, 6000–8000 ft., *Oersted 11696* (Lectotype C, n.v. (photos F, MO, NY); designated by Standley, 1938).—**Hillia triflora** (Oerst.) C. M. Taylor var. **triflora**

Relbunium Hook. f. in Benth. & Hook. f., Gen. Pl. 2: 149. 1873. Type: Not designated. [Herein treated as a synonym of *Galium* L.]

Relbunium aschenbornii (S. Schauer) Hemsl., Biol. Centr.-Amer., Bot. 2: 62. 1881. *Galium aschenbornii* S. Schauer, Linnaea 20: 701. 1847. Type: MEXICO: Zimapan in Mexico, *Aschenborn 92* (Holotype presumably BR or K, n.v.; probable fragment JE, n.v.).—**Galium aschenbornii** S. Schauer

Relbunium hypocarpium (L.) Hemsl., Biol. Centr.-Amer., Bot. 2: 63. 1881. *Valantia hypocarpia* L., Syst. Nat., ed. 10, 1307. 1759. Type: JAMAICA: Rubia I, Browne, Hist. Jamaica 141 (Holotype LINN, n.v.).—**Galium hypocarpium** (L.) Endl. ex Griseb.

Relbunium laevigatum (DC.) Hemsl., Biol. Centr.-Amer., Bot. 2: 63. 1881. *Rubia laevigata* DC., Prodr. 4: 591. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumbly PR, n.v.).—**Galium microphyllum** A. Gray

Relbunium mazocarpum Greenm., Proc. Amer. Acad. Arts 41: 250. 1905. Type: MEXICO: Hidalgo, moist banks, barranca below Trinidad Iron Works, 5500 ft., 6 May 1904, *C. G. Pringle 8834* (Holotype GH, n.v.; Isotypes MEXU, UC, n.v., US (photos MEXU, PTBG)).—**Galium sphagnophilum** (Greenm.) Dempster var. **mazocarpum** (Greenm.) Dempster

Relbunium microphyllum (A. Gray) Hemsl., Biol. Centr.-Amer., Bot. 2: 63. 1881. *Galium microphyllum* A. Gray, Pl. Wright. 1: 80. 1852. Type: U.S.A.: New Mexico, from western Texas to El Paso, New Mexico, May–Oct 1849, *C. Wright 234* (Holotype GH, n.v.; Isotype US (photo PTBG)).—**Galium microphyllum** A. Gray

Relbunium microphyllum (A. Gray) Hemsl. var. *hispidulum* Greenm., Proc. Amer. Acad. Arts 33: 470. 1898. Syntypes: MEXICO: San Luis Potosí, valley of San Luis Potosí, *Schaffner 842* (GH, n.v.). Region of San Luis Potosí, 1850–2460 m, *Perry & Palmer 308* (GH, n.v.).—**Galium microphyllum** A. Gray

Relbunium microphyllum (A. Gray) Hemsl. var. *setulosum* Greenm., Proc. Amer. Acad. Arts

33: 470. 1898. Syntypes: MEXICO: Hidalgo, Zimapan, *Coulter 186* (GH, n.v.); San Luis Potosí, region of San Luis Potosí, *C. C. Perry & E. Palmer 309* (GH, n.v.), *C. C. Perry & E. Palmer 310* (GH, n.v.).—**Galium microphyllum** A. Gray

Relbunium polyplocum Hemsl., Diag. Pl. Nov. Mexic. 53. 1880. Type: MEXICO: San Luis Potosí, without precise locality, 1878, *C. C. Parry & E. Palmer 308* (Syntype US 19271 (photos MEXU, PTBG), K, n.v.). MEXICO: Veracruz, Mirador, *Linden 516* (Syntype K, n.v.), *Liebmann 243* (Syntype K, n.v.), *Liebmann 244* (Syntype K, n.v.).—**Galium microphyllum** A. Gray

Relbunium sphagnophilum Greenm., Proc. Amer. Acad. Arts 33: 468. 1898. Type: MEXICO: Oaxaca, Sierra de Clavellinas, 2270 m, 17 Oct 1894, *C. G. Pringle 5812* (Holotype GH, n.v.).—**Galium sphagnophilum** (Greenm.) Dempster var. **sphagnophilum**

Rhodostoma Scheidw., Allg. Gartenzeitung 10: 286. 1842. Type: Rhodostoma gardenioides Scheidw.

Rhodostoma gardenioides Scheidw., Allgem. Gartenzeitung 10: 286. 1842. Type: Based on cultivated material of uncertain origin, presumably Veracruz, Mexico (type not designated). *Palicourea*.—**Psychotria gardenioides** (Scheidw.) Standl.

Richardia L., Sp. Pl. 1: 330. 1753. Type: Richardia scabra L.

Richardia adscendens (Pav. ex DC.) Steud., Nom. Bot., ed. 2, 458. 1841. *Richardsonia adscendens* Pav. ex DC., Prodr. 4: 569. 1830. Type: MEXICO: Without precise locality, *Moricand s.n.* (Holotype G-DC, n.v. (photo MO)).—**Richardia brasiliensis** Gomes

Richardia brasiliensis Gomes, Mem. Ipecacuanha Bras. 31, *t. 2*. 1801. Type: BRAZIL: Without precise locality, *Gomes s.n.* (Holotype LISU, n.v.).

Richardia gandarae Rzed., Bol. Soc. Bot. México 44: 77, *fig. 2*. 1983. Type: MEXICO: San Luis Potosí, Santa María del Río, 1750 m, terrenos arenosos, 23 Jun 1954, *J. Rzedowski 3168* (Holotype ENCB).

Richardia haenkeana (DC.) Steud., Nom. Bot., ed. 2, 459. 1841. *Richardsonia haenkeana* DC., Prodr. 4: 569. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.).—**Richardia humistrata** (Cham. & Schltdl.) Steud.

Richardia humistrata (Cham. & Schltdl.) Steud., Nom. Bot., ed. 2, 459. 1841. *Richardsonia humistrata* Cham. & Schltdl., Linnaea 3: 353. 1828. Type: URUGUAY: Montevideo, in Brasiliae meridionalis provincia Montevideo, *Sellow s.n.* (Holotype B, presumably destroyed (fragment F)).

Richardia procumbens Sessé & Moç., Fl. Mexic., ed. 2, 83. 1894. Type: MEXICO: Habitat in Ahualulci apricis, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Richardia scabra** L.

Richardia scabra L., Sp. Pl. 1: 330. 1753. Type: MEXICO: Veracruz (Lectotype LINN 451.1 (n.v.); for typification see Lewis & Oliver, 1974).

Richardia tricocca (Torr. & A. Gray) Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 386. 1931. subsp. **tricocca**. *Diodia tricocca* Torr. & A. Gray, Fl. N. Amer. 2: 30. 1841. Type: U.S.A.: Texas, *Drummond 117* (Holotype GH, n.v.; Isotype G, n.v.).

Richardia tricocca (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv., Brittonia 26: 287. 1974. *Spermacoce tetracocca* M. Martens & Galeotti, Bull. Acad. Roy. Soc. Bruxelles 11: 132. 1844. Type: MEXICO: Michoacán, Santa María, near Morelia, *H. Galeotti 2587* (Holotype BR, n.v.; Isotypes K, n.v., P (photos MEXU, PTBG)).

Richardsonia Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 350. 1819. [Herein treated as a synonym of *Richardia* L.]

Richardsonia adscendens Pav. ex DC., Prodr. 4: 569. 1830. Type: MEXICO: Without precise locality, *Moricand s.n.* (Holotype G-DC, n.v. (photo MO)). *Richardia*.—**Richardia brasiliensis** Gomes

Richardsonia brasiliensis (Gomes) Hayne, Getr. Darstell. Gew. 14: *tab. 21*. 1846. *Richardia brasiliensis* Gomes, Mem. Ipecacuanha Bras. 31, *tab. 2*. 1801. Type: BRAZIL: Without precise locality, *Gomes s.n.* (LISU, n.v.). —**Richardia brasiliensis** Gomes

Richardsonia haenkeana DC., Prodr. 4: 569. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.). *Richardia*.—**Richardia humistrata** (Cham. & Schltdl.) Steudel

Richardsonia humistrata Cham. & Schltdl., Linnaea 3: 353. 1828. Type: URAGUAY: Montevideo, in Brasiliae meridionalis provincia Montevideo, *Sellow s.n.* (Holotype B, presumably destroyed (fragment F)). —**Richardia humistrata** (Cham.) Schltdl.) Steud.

Richardsonia scabra (L.) A. St.-Hil., Pl. Us. Bras. 8: 1. *t. 8*. 1824, p.p. Richardia scabra L., Sp. Pl. 1: 330. 1753. Type: MEXICO: Veracruz, (Holotype LINN 451.1 (n.v.)). —**Richardia scabra** L.

Richardsonia tetracocca (M. Martens & Galeotti) K. Schum. ex Loes., Repert. Sp. Nov. 18: 362. 1922. *Spermacoce tetracocca* M. Martens & Galeotti, Bull. Acad. Roy. Soc. Bruxelles 11: 132. 1844. Type: MEXICO: Michoacán, Santa María, near Morelia, *H. Galeotti 2587* (Holotype BR, n.v.; Isotypes K, n.v., P (photos MEXU, PTBG)). *Diodia*. —**Richardia tricocca** (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv.

Richardsonia tetracocca var. *calvescens* Loes., Repert. Sp. Nov. 18: 362. 1922. Syntypes: MEXICO: Without precise locality, *Schaffner 281* (K, n.v.); *Schaffner 282* (K, n.v.). —**Richardia tricocca** (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv.

Rogiera Planch., Fl. Serr. Jard. 5: *tab. 442*. 1849. Lectotype: Rogiera amoena Planch. (designated by Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982). [Herein treated as a synonym of *Rondeletia* L.]

Rogiera amoena Planch., Fl. Serr. Jard. 5: *tab. 442, figs. 1, 2*. 1849. Type: Based on plants cultivated in Belgium, presumably from Guatemalan seed (type not designated). —**Rondeletia amoena** (Planch.) Hemsl.

Rogiera aprica (Lundell) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia aprica* Lundell, Contrib. Univ. Michigan Herb. 7: 54. 1942. Type: MEXICO: Chiapas, Saxchanal, Sierra Madre, 1–5 Jul 1941, *E. Matuda 4314* (Holotype TEX-LL (photos MEXU, MO, PTBG); Isotypes A, n.v., F, MO, US (photos MEXU, PTBG)).—**Rondeletia cordata** Benth.

Rogiera backhousii (Hook. f.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia backhousii* Hook. f., Bot. Mag. 103: *tab. 6290*. 1877. Type: Based on material of unknown origin cultivated at Kew, obtained from the Backhouse establishment in York (type not designated).—**Rondeletia backhousii** Hook. f.

Rogiera brachistantha (Standl. & Steyerm.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia brachistantha* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 25. 1943. Type: GUATEMALA: San Marcos, Río Vega, near San Rafael and Guatemala-Mexico boundary, Volcán Tacaná, 2500–3000 m, 20 Feb 1940, *J. A. Steyermark 36286* (Holotype F 1050045 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Rondeletia cordata** Benth.

Rogiera chiapasensis (Standl.) Borhidi, Acta Bot. Hung. 33: 301. 1987. *Rondeletia chiapasensis* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 54. 1940. Type: MEXICO: Chiapas, Cascarada, 31 Dec 1936, *E. Matuda 1064* (Holotype MICH, n.v. (fragment F); Isotype A, n.v.).—**Gonzalagunia chiapasensis** (Standl.) Standl. & Steyerm.

Rogiera cordata (Benth.) Planch., Fl. Serr. Jard. 5: *tab. 442b*. 1849. *Rondeletia cordata* Benth., Pl. Hartweg. 85. 1841. Type: GUATEMALA: In praeruptis prope Guatemala [Guatemala City], Jan 1841, *T. Hartweg 585* (Holotype K (photo PTBG); Isotype G-DEL, n.v. (fragment F)).—**Rondeletia cordata** Benth.

Rogiera ehrenbergii (K. Schum. ex Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Rondeletia ehrenbergii* K. Schum. ex Standl., N. Amer. Fl. 32: 50. 1918. Type: GUATEMALA: Totonocapán, *Ehrenberg 1033* (Holotype US 594426 (photos F, MEXU, PTBG); Isotype B, presumably destroyed (photos F, MO, US)).—**Rondeletia gratissima** Planch. & Linden

Rogiera elegans Planch., Fl. Serr. Jard. 5: *tab. 442*. 1849. Type: Based on cultivated material grown in Belgium of Guatemalan origin (type not designated).—**Rondeletia amoena** (Planch.) Hemsl.

Rogiera gratissima Planch. & Linden, Fl. Serr. Jard. 15: 133, and *unnumbered figure*. 1864. Type: Based on cultivated material grown in Belgium brought from Chiapas, Mexico, by Ghiesbreght (type not designated). Note: two collections at K ["From the garden of Sir C. W. Strickland, Recd. Apl. 1897," and "Hort. Kew 1879"] are not types. —**Rondeletia gratissima** (Planch. & Linden) Hemsl.

Rogiera intermedia (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Rondeletia intermedia* Hemsl., Diag. Pl. Nov. Mexic. 26. 1879. Type: MEXICO: Chiapas, *Linden 1661* (Lectotype K (photo PTBG), here designated; Isolectotype P (photos MEXU, PTBG)). —**Rondeletia cordata** Benth.

Rogiera langlassei (Standl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Rondeletia langlassei* Standl., N. Amer. Fl. 32: 53. 1918. Type: MEXICO: [Michoacán or Guerrero], Sierra Madre, 1750 m, 26 Jan 1899, *E. Langlassé 797* (Holotype US 386194 (photos MEXU, PTBG); Isotypes B, presumably destroyed (fragment F), G-DEL, n.v. (fragment F), K (photo PTBG), P (2 sheets; photos MEXU, PTBG)).—**Rondeletia amoena** (Planch.) Hemsl.

Rogiera latifolia (Oerst.) Decne., Rev. Hortic., ser. 4, 2: 121. 1853. *Rondeletia latifolia* Oerst., Vidensk Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 43. 1853. Type: NICARAGUA: In monte Pantasmo, in Segovia, Jan 1848, *Oersted 76* [=*Plantae Centroamericanae Oersted 11678*] (Holotype presumably C, n.v.; Isotypes K (photo PTBG), US (photo PTBG)).—**Rondeletia amoena** (Planch.) Hemsl.

Rogiera ligustroides (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Rondeletia ligustroides* Hemsl., Diag. Pl. Nov. Mexic. 26. 1879. Type: MEXICO: Veracruz, Orizaba, *Botteri 971* (Lectotype K, here designated (photo PTBG); Isolectotypes P (2 sheets, photos MEXU, PTBG)). Syntypes: MEXICO: Veracruz, Orizaba, *Bourgeau 2518* (K (photo PTBG), P (3 sheets; photos MEXU, PTBG)). Region d'Orizaba, *Bourgeau 2622* (K (photo PTBG), B (n.v.; fragment F), F, K (photo PTBG), P (4 sheets; photos MEXU, PTBG), US (2 sheets)). Orizaba, *Botteri 474* (K, 2 sheets: label on first states "coll. *Salle*," second states "Sumichrast coll."; photos PTBG), P (photos MEXU, PTBG). Orizaba, *Botteri 1951* (K, n.v., P (2 sheets; photos MEXU, PTBG). Orizaba, *Muller 969* (K, n.v., P (photos MEXU, PTBG). Orizaba, *Muller 1308* (K, n.v.). The K sheet of *Botteri 971* is selected as lectotype because it has three leafy twigs, an abundance of flowers at anthesis, and two duplicates at P.—**Rondeletia ligustroides** Hemsl.

Rogiera menechma Planch., Fl. Serr. Jard. 5: *tab. 442*. 1849. Type: Based on cultivated material grown in Belgium, of Guatemalan origin (type not designated).

Rogiera pittieri (K. Schum. & K. Krause) Borhidi, Acta Bot. Acad. Sci. Hung. 67. 1982. *Rondeletia pittieri* K. Schum. & K. Krause ex K. Schum., Bot. Jahrb. 40: 316. 1908. Type: COSTA RICA: Bords du Río Porós, 2000 m, 10 Jan 1890, *H. Pittier & T. Durand 1729* (Holotype B, presumably destroyed (photos F, MO); Isotype US (photos MEXU, PTBG)). —**Rondeletia amoena** (Planch.) Hemsl.

Rogiera roezlii Planch., Fl. Serr. Jard. 5: *tab. 442*. 1849. Type: Based on cultivated material grown in Belgium, probably of Guatemalan origin (type not designated).—**Rondeletia amoena** (Planch.) Hemsl.

Rogiera seleriana (Loes.) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia seleriana*

Loes., Verh. Bot. Ver. Brandenb. 65: 105. 1923. Type: GUATEMALA: Huehuetenango, Nentón Distr., near Chaculá, *E. Seler & C. Seler 3015* (Holotype B, presumably destroyed (photos F, MO, US), fragment F). —**Rondeletia gratissima** (Planch. & Linden) Hemsl.

Rogiera stenosiphon (Hemsl.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Rondeletia stenosiphon* Hemsl., Diag. Pl. Nov. Mexic. 26. 1879. Type: MEXICO: Yucatán and Tabasco, without precise locality, *E. P. Johnson s.n.* (Holotype K (photo PTBG)).—**Rondeletia stenosiphon** Hemsl.

Rogiera strigosa (Benth.) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Bouvardia strigosa* Benth., Pl. Hartweg. 75. 1841. Type: GUATEMALA: Quezaltenango, [Volcán] Zunil, Nov., *T. Hartweg 530* (Lectotype K (photo PTBG), here designated; Isolectotypes G-DEL, n.v. (fragment F), P (photos F, MEXU, MO, PTBG), W, n.v. (photos F, MO)). Syntype: GUATEMALA: Volcán de Fuego, 6000–6400 ft., *Salvin s.n.* (K (photo PTBG, fragment F)). The K specimen of *Hartweg 530* is the better choice for lectotype, with duplicates in three other herbaria. —**Rondeletia strigosa** (Benth.) Hemsl.

Rogiera subscandens (Lundell) Borhidi, Acta Bot. Hung. 35: 311. 1989. *Rondeletia subscandens* Lundell, Wrightia 5: 328. 1976. Type: GUATEMALA: Petén, La Cumbre, about 500 m west of km 142/143 of the Cadenas Road, 10 Sep 1976, *C. L. Lundell & E. Contreras 19830* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F (photo PTGB), K (photo PTBG)).—**Rondeletia subscandens** Lundell

Rogiera suffrutescens (Brandegee) Borhidi, Acta Bot. Acad. Sci. Hung. 28: 67. 1982. *Rondeletia suffrutescens* Brandegee, Univ. Calif. Publ. Bot. 6: 70. 1914. Type: MEXICO: Chiapas, Cerro del Boquerón, Aug 1913, *C. A. Purpus 6704* (Holotype UC 172451, n.v.; Isotypes F (photos MEXU, PTBG), MO, US (photos MEXU, PTBG)).—**Rondeletia suffrutescens** Brandegee

Rogiera versicolor (J. Sm.) Lindl. & Paxton, Paxton Fl. Gard. 2: 69. July 1851. *Rondeletia versicolor* J. Sm., Bot. Mag. 7: *tab. 4579*. 1851. Type: Based on cultivated material grown at Kew sent by Seemann from Boquete, Veraguas, Panama (type not designated).—**Rondeletia amoena** (Planch.) Hemsl.

Ronabea Aubl., Hist. Pl. Guiane 1: 154; 2 (Index): 26, *t. 59*. 1775. Type: Ronabea latifolia Aubl. [Herein treated as a synonym of *Psychotria* L.]

Ronabea erecta Aubl., Hist. Pl. Guiane 1: 156. 1775. Type: FRENCH GUIANA: In sylvis Oyao, Orapu, Sinemari, *Aublet s.n.* (Holotype presumably BM, n.v.).—**Psychotria erecta** (Aubl.) Standl. & Steyerm.

Rondeletia L., Sp. Pl. 1: 172. 1753. Lectotype: Rondeletia americana L. (Designated by Howard, 1989.)

Rondeletia acuminata (Oerst. ex Standl.) Lorence & Cast.-Campos, Biotica 13: 147. 1988. *Sommera acuminata* Oerst. ex Standl., J. Wash. Acad. Sci. 17: 340. 1927. Type: MEXICO: Oaxaca, Amatlán, *F. Liebmann 11712* (Holotype C, n.v. (photo MEXU); Isotype US (photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia scabra** Hemsl.

Rondeletia aetheocalymna Donn. Sm., Bot. Gaz. (Crawfordsville) 42: 298. 1906. Type: GUATEMALA: Alta Verapaz, trail between Sepacuité and Secanquím, 550–1000 m, 14 Jan 1905, *W. R. Maxon & R. Hay 3275* (Holotype US 473244 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia affinis Hemsl., Diag. Pl. Mex. 28. 1879. Type: MEXICO: Veracruz, Zongolica [Sierra de Zongolica], Jun 1866, *Sumichrast* [sub *Botteri 1017*] (Lectotype K, here designated; Isolectotypes K (photo PTBG), P (2 sheets, photos MEXU, MO, PTBG)). Syntypes: MEXICO: Chiapas, *Ghiesbreght 686* (K (photo PTBG), P (photos MEXU, PTBG), MO). COSTA RICA: *Endres 226* (K). PANAMA: Veraguas, *Seemann 1594*

(K). The K specimen of *Sumichrast* sub *Botteri 1017* is the best choice for lectotype and has duplicates in two other herbaria. —**Rondeletia buddleioides** Benth.

Rondeletia albida Lundell, Wrightia 5: 323. 1976. Type: MEXICO: Chiapas, Carelas, near Motozintla, 2176, Apr 1945, *E. Matuda 5509* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MEXU, TEX-LL).—**Rondeletia laniflora** Benth.

Rondeletia amoena (Planch.) Hemsl., Diag. Pl. Mex. 26. 1879. *Rogiera amoena* Planch., Fl. Serr. Jard. 5: *tab. 442, figs 1, 2*. 1849. Type: Based on plants cultivated in Belgium, presumably from Guatemalan seed (type not designated).

Rondeletia aprica Lundell, Contrib. Univ. Michigan Herb. 7: 54. 1942. Type: MEXICO: Chiapas, Saxchanal, Sierra Madre, in advanced forest, 1–5 Jul 1941, *E. Matuda 4314* (Holotype TEX-LL (photos MEXU, MO, PTBG); Isotypes A, n.v., F, MO, US (photos MEXU, PTBG)). *Rogiera*. —**Rondeletia cordata** Benth.

Rondeletia aspera Standl., N. Amer. Fl. 32: 54. 1918. Type: COSTA RICA: San José, Pont du Rodeo, Pacacol (Villa Colón), Jan 1891, *H. Pittier 3243* (Holotype US 941408 (photo PTBG)). *Arachnothryx*.

Rondeletia atravesadensis Lorence, Novon 1: 137, *fig. 1A, B*. 1991. Type: MEXICO: Oaxaca, Cerro Atravesada-Cerro Azul, Arroyo Rana, 6 Dec 1956, *T. MacDougall s.n.* (Holotype MEXU 253128 (photo PTBG)).

Rondeletia backhousii Hook.f., Bot. Mag. 103: *tab. 6290*. 1877. Based on material of unknown origin cultivated at Kew, obtained from the Backhouse establishment in York (type not designated). *Rogiera*.—**Status uncertain**, resembles *Rondeletia panamensis* DC. but is nearly glabrous.

Rondeletia belizensis Standl., Carnegie Inst. Wash. Publ. 461: 91. 1935. Type: BRITISH HONDURAS (BELIZE): Jacinto Hills, 300 ft., 28 Aug 1933, *W. A. Schipp 1201* (Holotype F 683600 (photos MEXU, PTBG); Isotypes GH, n.v., K (photo PTBG), MO). *Arachnothryx*.

Rondeletia belizensis Standl. var. *longiloba* Lundell, Wrightia 5: 323. 1976. Type: GUATEMALA: Alta Verapaz, Rubelsanto, 2.3 km SEE [=ESE] of Balastrera, 20 Jul 1975, *C. L. Lundell & E. Contreras 19545* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MO (photo PTBG)).—**Rondeletia belizensis** Standl.

Rondeletia bertieroides Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 267. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp, Chiriquí Trail, 900 m, 1928, *G. P. Cooper 598* (Yale 12231) (Holotype F 579614 (photo PTBG); Isotype NY, n.v.). *Arachnothryx*.

Rondeletia bourgaei Standl., N. Amer. Fl. 32: 56. 1918. Type: MEXICO: Veracruz, Region de Orizaba, Monte San Cristóbal, 8 Jul 1866, *E. Bourgeau 2618* (Holotype US 49964 (photos MEXU, PTBG); Isotypes P (4 sheets, photos MEXU, PTBG)). *Arachnothryx*. —**Rondeletia laniflora** Benth.

Rondeletia brachistantha Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 25. 1943. Type: GUATEMALA: San Marcos, Río Vega, near San Rafael and Guatemala-Mexico boundary, Volcán Tacaná, 2500–3000 m, 20 Feb 1940, *J. A. Steyermark 36286* (Holotype F 1050045 (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)). *Rogiera*. —**Rondeletia cordata** Benth.

Rondeletia brandegeeana Lorence, Novon 1: 138. 1991. Based on *Otocalyx chiapensis* Brandegee, Univ. Calif. Publ. Bot. 6: 69. 1914. Not *Rondeletia chiapasensis* Standl., 1940. Type: MEXICO: Chiapas, Cerro del Boquerón, middle region, moist valley slopes, Aug 1913, *C. A. Purpus 7041* (Holotype UC 173047 (photo PTBG); Isotypes GH, US (fragment)).

Rondeletia breedlovei Lorence, Novon 4: 129, *fig. 6*. 1994. Type: MEXICO: Chiapas, Mun. of Tenejapa, paraje of Mahben Chauk, on slopes along the Tana Te' River near Shal K'esh, 2900 ft., 27 Nov 1964, *D. E. Breedlove 7682* (Holotype F 1617735 (photo PTBG); Isotype CAS (photo PTBG)).

Rondeletia brenesii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1370. 1938. Type: COSTA RICA: Camino de San Ramón a La Calera, 20 Mar 1929, *A. M. Brenes 6757* (Holotype F 854972 (photo PTBG)). *Arachnothryx*.

Rondeletia buddleioides Benth., Pl. Hartweg. 69. 1840. Type: MEXICO: Oaxaca, in planitie Llano Verde, *T. Hartweg 502* (Holotype K (photo PTBG)); Isotypes B (destroyed, photo MO, fragment G-DEL), K (photo PTBG), NY, n.v. (fragment US, photos MEXU, PTBG), P (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia buddleioides Benth. var. *aspera* J. H. Kirkbr., Ann. Missouri Bot. Gard. 55: 379. 1968. Type: PANAMA: Bocas del Toro, between Criollo (just above Buena Vista) and Quebrada Higuerón on Chiriquí Trail, 18 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 780* (Holotype MO 1942973 (photos MEXU, PTBG); Isotype US). *Arachnothryx*.
—**Rondeletia buddleioides** Benth.

Rondeletia calycosa Donn. Sm., Bot. Gaz. (Crawfordsville) 56: 59. 1913. Type: COSTA RICA: San José, forêts de La Palma, 1460 m, 25 Sep 1898, *A. Tonduz 11633* (Holotype US no 941406 (photos F, MEXU, PTBG)). *Arachnothryx*.

Rondeletia capitellata Hemsl., Diag. Pl. Mex. 28. 1879. Type: MEXICO: Without precise locality, *Jurgensen 355* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL, n.v. (fragment F), K (photo PTBG). Syntypes: MEXICO: Oaxaca, Joya, *F. Liebmann 202* (K (photo PTBG)). MEXICO: Without precise locality, *Jurgensen 376* (K (photo PTBG)). *Arachnothryx*. The K sheet of *Jurgensen 355* is very floriferous and represents the best choice for lectotype. Note: *Rondeletia capitellata* and *R. liebmannii* Standl. are synonymous. Material from Veracruz and Hidalgo erroneously identified as *R. capitellata* in many herbaria actually represents a distinct species, *R. pringlei* Lorence.

Rondeletia chaconii Lorence in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 296. 1993. Type: COSTA RICA: Heredia, Magsasay, pasturas, bosque socolado, finca de Bernardo Gómez, 700 m, 1 Jan 1983, *I. C. Chacón 177* (Holotype CR 92850; Isotype MO).

Rondeletia chiapasensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 54. 1940. Type: MEXICO: Chiapas, Cascarada, 31 Dec 1936, *E. Matuda 1064* (Holotype MICH, n.v. (fragment F); Isotype A, n.v.). *Rogiera*.
—**Gonzalagunia chiapasensis** (Standl.) Standl. & Steyerm.

Rondeletia chinajensis Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 254. 1947. Type: GUATEMALA: Alta Verapaz, Cerro Chinajá, between Finca Yalpemech and Chinajá, above source of Río San Diego, 150–700 m, 1–2 Apr 1942, *J. A. Steyermark 45637* (Holotype F 1134210 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia chiriquiana Lorence, Novon 4: 129, *fig. 7*. 1994. Type: PANAMA: Chiriquí, Fortuna Dam area, along shores of Río Chiriquí where it enters reservoir, 1000 m, 8°45'N, 82°13'W, 2 Aug 1984, *H. W. Churchill 5924* (Holotype MO 3595277 (photo PTBG)).

Rondeletia cooperi Standl., Publ. Field Columbian Mus., Bot. Ser. 4: 267. 1929. Type: PANAMA: Bocas del Toro, Buena Vista Camp, on Chiriquí Trail, 1250 ft., Jan–Mar 1928, *G. P. Cooper 600* (Yale 12233) (Holotype F 579596 (photo PTBG); Isotype NY, n.v.). *Arachnothryx*.

Rondeletia cordata Benth., Pl. Hartweg. 85. 1841. Type: GUATEMALA: In praeruptis prope Guatemala [Guatemala City], Jan 1841, *T. Hartweg 585* (Holotype K (photo PTBG); Isotype G-DEL, n.v. (fragment F)). *Rogiera*.

Rondeletia cordovana Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 26. 1943. Type: GUATEMALA: Zacapa, in ravine bordering Quebrada Alejandria, summit of Sierra de las Minas, vicinity of Finca Alejandra, 2500 m, 13 Oct 1939, *J. A. Steyermark 29906* (Holotype F 1042952 (photos MEXU, PTBG); Isotype US (photos

MEXU, PTBG)). *Arachnothryx*.—**Rondeletia brandegeeana** Lorence

Rondeletia cornifolia Benth., Pl. Hartweg. 39. 1840. Type: MEXICO: Michoacán, prope Morelia, *T. Hartweg 299* (Holotype K (photo MEXU); Isotypes BM, G-DEL, n.v. (fragment F), P (photos MEXU, MO, PTBG), US (fragment, photos MEXU, PTBG), W (2 sheets, photos PTBG)). *Choristes*.—**Deppea cornifolia** (Benth.) Benth.

Rondeletia costaricensis Standl., N. Amer. Fl. 32: 61. 1918. Type: COSTA RICA: Buena Vista, San Carlos, 900 m, Apr 1903, *H. Pittier 16696* (Holotype US 764141 (photos MEXU, PTBG); Isotypes B, presumably destroyed (fragment F), US). *Arachnothryx*.

Rondeletia darcyi Dwyer, Ann. Missouri Bot. Gard. 67: 467. 1980. Type: PANAMA: Colón, road bank just W of Portobelo, 12 Apr 1970, *W. G. D'Arcy 4079* (Holotype MO 2238438 (photo PTBG); Isotype MO (photo PTBG)). *Arachnothryx*.—**Rondeletia secunda** Standl.

Rondeletia dariensis Standl., N. Amer. Fl. 32: 53. 1918. Type: PANAMA: Darién, Boca de Paurandó, on Sambú River, southern Darién, 20 m, Feb 1912, *H. Pittier 5684* (Holotype US 867136 (photos F, MEXU, PTBG, US); Isotypes F (photo PTBG), US (2 sheets)). *Arachnothryx*.

Rondeletia deamii (Donn. Sm.) Standl., N. Amer. Fl. 32: 60. 1918. *Bouvardia deamii* Donn. Sm., Bot. Gaz. (Crawfordsville) 49: 455. 1910. Type: GUATEMALA: Guatemala, at base of Rillo de las Nabajas, about ¾ mile front side of Fiscal, 3700 ft., 5 Jun 1909, *C. C. Deam 6190* (Holotype US 579579 (photos MEXU, PTBG); Isotypes A, n.v., F (photo PTBG), GH, n.v., MO (photos MEXU, PTBG), US (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia dubia Hemsl., Diag. Pl. Mex. 28. 1879. Based on *Bouvardia discolor* Hook. & Arn., Bot. Beechy Voy. 428. 1840. Not *Rondeletia discolor* Kunth in Humb., Bonpl. & Kunth, 1820. Type: MEXICO: Oaxaca, Inter Tehuantepec et Voca [Boca] del Monte, in dit. Oaxaca, maximè [?] australi, Sept., *G. Andrieux 334* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL, n.v. (fragment F), P, (photos MEXU, PTBG), W, n.v. (photos F, MO)). Syntype: MEXICO: Sierra Madre, N. W. of Mexico, *Seemann 2057* (K (photo PTBG)). The K sheet of *Andrieux 334* is richly flowering and has duplicates in three other herbaria. —**Rondeletia leucophylla** Kunth in Humb., Bonpl. & Kunth

Rondeletia dukei Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 144. 1967. Type: PANAMA: Darién, Río Pirre, 24 May 1966, *J. A. Duke 8329* (Holotype MO, unnumbered sheet (photo PTBG)).—**Wittmackanthus stanleyanus** (R. H. Schomb.) Kuntze

Rondeletia dwyeri Lorence, Novon 1: 139. 1991. Based on *Chomelia leucophylla* Dwyer, Ann. Missouri Bot. Gard. 67: 98. *fig. 21.* 1980. Not *Rondeletia leucophylla* Kunth in Humb., Bonpl. & Kunth, 1820. Type: PANAMA: Darién, slopes of Cerro Chucula, drainage of Río Pavarando, 11 Feb 1972, *A. Gentry 4262* (Holotype MO 2097508; Isotype MO 2161959).

Rondeletia edwardsii Standl., Trop. Woods 37: 31. 1934. Type: HONDURAS: Comayagua, Pito Solo, Lake Yojoa, 2000 ft., 29 Aug 1932, *J. B. Edwards P476* (Holotype F 662645 (photos MEXU, PTBG); Isotypes A, n.v., US). *Arachnothryx*.

Rondeletia eherenbergii K. Schum. ex Standl., N. Amer. Fl. 32: 50. 1918. Type: GUATEMALA: Totonocapán, *Ehrenberg 1033* (Holotype US 594426 (photos F, MEXU, PTBG); Isotype B, presumably destroyed (photos F, MO, US)). *Rogiera*. —**Rondeletia gratissima** Planch. & Linden

Rondeletia elongata Bartl. ex DC., Prodr. 4: 409. 1830. Type: MEXICO: Guerrero, ad Acapulco, *Haenke s.n.* (Holotype presumably PR, n.v.; Isotype W, n.v. (photos F, MO)). *Arachnothryx*.—**Rondeletia leucophylla** Kunth in Humb., Bonpl. & Kunth

Rondeletia evansii Lorence, Novon 7: 52, *fig. 4*. 1997. Type: HONDURAS: Dept. Lempira, Parque Nacional de Celaque, sendero entre la planta eléctrica y la primera casa abandonada de Don Tomás, 14°36'N, 88°40'W, 1800 m,

28 Jan 1992, *P. House 1163* (Holotype PTBG 16112; Isotypes EAP, n.v., HEH, n.v., MO, TEFH, n.v.).

Rondeletia falciformis Lundell, Wrightia 5: 324. 1976. Type: HIDALGO: Km 332 of Mexico City-Laredo highway, above Chapulhuacan, 3800 ft., 13 Jul 1943, *C. L. Lundell 12234* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F (photo PTBG), K (photo PTBG)). *Arachnothryx*.—**Rondeletia heteranthera** Brandegee

Rondeletia galeottii Standl., N. Amer. Fl. 32: 59. 1918. Type: MEXICO: Without precise locality, *H. Galeotti s.n.* (Holotype US 454830 (photos MEXU, PTBG); probable Isotypes [labels state "Chinantla, 1844, fl. Juillet, *Galeotti 2684C*"] F, P, n.v. (fragment F)). *Arachnothryx*.

Rondeletia ginetteae Lorence, Novon 1: 141, *fig. 2A–G*. 1991. Type: MEXICO: Oaxaca, Distr. de Tuxtepec, Ruta 175 Tuxtepec to Oaxaca, ca. 10 km S of Valle Nacional, Sierra de Juárez, 750 m, 6 Dec 1980, *D. H. Lorence & R. Cedillo T. 2973* (Holotype MEXU (photo PTBG); Isotypes F (photo PTBG), MO).

Rondeletia gonzaleoides Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 160. 1930. Type: MEXICO: Chiapas, Pueblo Nuevo [Solistahuacan], 2200 m, 1840, *J. Linden 149* (Holotype LE, n.v. (fragment F, photos MEXU, PTBG); Isotype K [label states "forêts humides de Sulusuchiapas"] (photo PTBG, fragment F), probable isotype P (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia gracilis Hemsl., Diag. Pl. Nov. Mexic. 53. 1880. Type: GUATEMALA: Alta Vera Paz, 3600 ft., March 1879, *H. von Tuerckheim 404* (Holotype K (photo PTBG)). *Arachnothryx*.

Rondeletia gracilispica Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 342. 1931. Type: MEXICO: Oaxaca, Sierra San Pedro Nolasco, Talea, etc., 1843–44, *C. Jurgensen 935* (Holotype K (photos F, PTBG, US), fragment F (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia gratissima (Planch. & Linden) Hemsl., Diag. Pl. Nov. Mexic. 25. 1879. *Rogiera gratissima* Planch. & Linden, Fl. Serr. Jard. 15: 133, and *unnumbered figure*. 1864. Type: Based on cultivated material grown in Belgium brought from Chiapas, Mexico by Ghiesbreght (type not designated). Note: two collections at K ["From the garden of Sir C. W. Strickland, Recd. Apl. 1897," and "Hort. Kew 1879"] are not types.

Rondeletia guerrerensis Lorence, Novon 1: 143, *fig. 8C, D*. 1991. Type: MEXICO: Guerrero, Mun. de Atoyac de Alvarez, a 23.5 km al NE de El Paraiso, camino Atoyac-Puerto del Gallo, 1700 m, 22 Nov 1983, *E. Martínez S. & F. Barrie 5596* (Holotype MEXU (photo PTBG); Isotypes BM, CAS, CHAPA, F, MO, PTBG).

Rondeletia hameliifolia Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 144. 1967 [as *hamelifolia*]. Type: PANAMA: Veraguas, Santiago, Aug 1961, *J. D. Dwyer 1350* (Holotype MO 1824657 (photo PTBG); Isotype NY, n.v.). *Arachnothryx*.

Rondeletia heteranthera Brandegee, Univ. Calif. Publ. Bot. 4: 387. 1913. Type: MEXICO: Veracruz, Baños del Carrizal, Aug 1912, *C. A. Purpus 6184* [as *6148* in protologue] (Holotype UC 155217, n.v.; Isotypes F, MO). *Arachnothryx*.

Rondeletia hondurensis Donn. Sm., Bot. Gaz. (Crawfordsville) 27: 335. 1899. Type: HONDURAS: Santa Bárbara, Río Chamelecón, 300 m, Dec 1888, *C. Thieme 5267* (Holotype US 943502 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG), US (2 sheets; photos MEXU, PTBG)). *Javorkaea*.

Rondeletia intermedia Hemsl., Diag. Pl. Nov. Mexic. 26. 1879. Type: MEXICO: Chiapas, à fleurs rouges, forêts de pins de Chiapas, *Linden 1661* (Lectotype K, here designated; Isolectotype P (photos MEXU, PTBG; fragment F). Syntypes: MEXICO: Chiapas, Pueblo Nuevo, fl. blanches-rouges avec extrémités, fevrier 1840, *Linden 1659* (K), G-DEL, n.v. (fragment F), P (photos MEXU, PTBG; fragment F)). MEXICO: Oaxaca,

Sierra de San Pedro Nolasco, *Jurgensen 798* (K (photo PTBG)). A probable isolectotype at P [*Linden s.n.* (fragment F)] annotated "fleurs rosatres" has corolla tubes 6–7 mm long and is likely a duplicate of *Linden 1661* at K. A probable syntype at P annotated "fleurs rouges" has corolla tubes 5–7 mm long and larger leaves, and is likely a duplicate of *Linden 1659* at K. The *Linden 1661* specimen at K is selected as lectotype, because it has more leaves, inflorescences, and young fruit. Hemsley noted that this species was intermediate between *R. amoena* and *R. cordata*, but the original material has sparsely pubescent lower leaf surfaces and is clearly synonymous with *R. cordata*. In the Flora of Guatemala Rubiaceae treatment Standley & Williams (1975) also treated this species as a synonym of *R. cordata* Benth. *Rogiera*. —**Rondeletia cordata** Benth.

Rondeletia izabalensis Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 286. 1940. Type: GUATEMALA: Izabal, Escoba, across the bay (west) from Puerto Barrios, near sea level, 3 May 1939, *P. C. Standley 72891* (Holotype F 991611 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia jurgensenii Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: MEXICO: Without precise locality [protologue states "Oaxaca, Sierra de San Pedro Nolasco"], *Jurgensen 248* (Holotype K (photo PTBG); Isotype G-DEL, n.v. (fragment F, label states "Trapiche de Concepción and Chicahuastla, Jun 1845")). *Arachnothryx*.

Rondeletia kirkbridei Dwyer, Ann. Missouri Bot. Gard. 67: 469. 1980. Type: PANAMA: Veraguas, 16 km NW of Santa Fé, on road to Calovébora (Panama Hwy. 35), 300–500 m, 16 May 1975, *S. Mori & J. Kallunki 6112* (Holotype MO 2300094 (photo PTBG)). *Arachnothryx*.—**Rondletia bertieroides** Standl.

Rondeletia langlassei Standl., N. Amer. Fl. 32: 53. 1918. Type: MEXICO: [Michoacán or Guerrero] Sierra Madre, 1750 m, 26 Jan 1899, *E. Langlassé 797* (Holotype US 386194 (photos MEXU, PTBG); Isotypes B, presumably destroyed (fragment F), G-DEL, n.v. (fragment F), K (photo PTBG), P (2 sheets; photos MEXU, PTBG)). *Rogiera*. —**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia laniflora Benth., Pl. Hartw. 85. 1841. Type: GUATEMALA: Mountains of Las Nubes, March 1841, *T. Hartweg 584* (Holotype K (photo PTBG), fragment US (photos MEXU, PTBG); Isotypes B, presumably destroyed (photos F, MO, US), G-DEL, n.v. (fragment F), P (photos MEXU, PTBG), W, n.v. (photo F)). *Arachnothryx*.

Rondeletia latifolia Oerst., Vidensk Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 43. 1853. Type: NICARAGUA: In monte Pantasmo in Segovia, Jan 1848, *Oersted 76* [=*Plantae centroamericanae Oersted 11678*] (Holotype C, n.v.; Isotypes K (photo PTBG), US (photo PTBG)). *Rogiera*.—**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia leptodictya B. L. Rob., Proc. Amer. Acad. Arts 45: 402. 1910. Type: MEXICO: [Boundary between Michoacán and Guerrero], Rives du Río Petatlán, 500 m, 24 Nov 1898, *E. Langlassé 666* (Holotype GH, n.v.; Isotypes F (photos MEXU, PTBG), G-DEL, n.v. (fragment F), K (photo PTBG), P (2 sheets; photos MEXU, PTBG; fragment F), US (photos MEXU, PTBG)). *Arachnothryx*. —**Rondeletia leucophylla** Kunth in Humb., Bonpl. & Kunth

Rondeletia leucophylla Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 395, *t. 290*. 1820. Type: MEXICO: Guerrero, inter Alto del Peregrino et flumen Papagallo, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v.; Isotypes B, presumably destroyed (photos F, MO), P (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia leucophylla Kunth in Humb., Bonpl. & Kunth var. *calycosa* Greenm., Proc. Amer. Acad. Arts 39: 92. 1903. Type: MEXICO: Oaxaca, 1650 m, Dec 1900, *C. Conzatti & V. González 1127* (Syntype GH, n.v.); Oaxaca, city of Oaxaca, 1550 m, *C. Conzatti 970* (Syntype GH, n.v.).—**Rondeletia leucophylla** Kunth in Humb., Bonpl. & Kunth

Rondeletia liebmannii Standl., J. Wash. Acad. Sci. 17: 336. 1927. Type: MEXICO: Oaxaca, without precise locality, 1841–43, *F. Liebmann 11834* (Holotype US 1315231 (photos MEXU, PTBG); Isotypes C, n.v. (photo F), P (photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia capitellata** Hemsl.

Rondeletia ligustroides Hemsl., Diag. Pl. Nov. Mexic. 26. 1879. Type: MEXICO: Veracruz, Orizaba, *Botteri 971* (Lectotype K, here designated (photo PTBG); Isolectotypes P (2 sheets, photos MEXU, PTBG). Syntypes: MEXICO: Veracruz, Orizaba, *Bourgeau 2518* (K (photo PTBG), P (3 sheets; photos MEXU, PTBG)). Region d'Orizaba, *Bourgeau 2622* (K (photo PTBG), B (n.v.; fragment F), F, K (photo PTBG), P (4 sheets; photos MEXU, PTBG), US (2 sheets)). Orizaba, *Botteri 474* (K (2 sheets [label on first states "coll. *Salle*"; second states "Sumichrast coll."] photos PTBG)), P (photos MEXU, PTBG). Orizaba, *Botteri 1951* (K, n.v., P (2 sheets; photos MEXU, PTBG). Orizaba, *Muller 969* (K, n.v., P (photos MEXU, PTBG). Orizaba, *Muller 1308* (K, n.v.). *Botteri 971* at K is selected as lectotype because it has three leafy twigs with an abundance of flowers at anthesis, and three duplicates exist at P. *Rogiera*.

Rondeletia linguiformis Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: GUATEMALA: Without precise locality, *Skinner s.n.* in 1857 (Holotype K (photo PTBG)). *Arachnothryx*.

Rondeletia longipetiolata Lundell, Wrightia 5: 325. 1976. Type: MEXICO: Chiapas, Mt. Ovando, near Escuintla, 14 Nov 1945, *E. Matuda 6146* (Holotype TEX-LL; Isotypes MEXU, TEX-LL). *Arachnothryx*.—**Rondeletia buddleioides** Benth.

Rondeletia lundelliana Standl., Contr. Univ. Michigan Herb. 4: 31. 1940. Type: BRITISH HONDURAS (BELIZE): El Cayo District, Vaca, 21 Apr 1938, *P. H. Gentle 2504* (Holotype F 941520 (photos MEXU, PTBG); Isotypes A, n.v., K (photo PTBG), TEX-LL ex MICH (photos MEXU, PTBG), US (2 sheets; photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia stenosiphon** Hemsl.

Rondeletia macdougallii Lorence, Novon 1: 144, *fig. 3A, B*. 1991. Type: MEXICO: Oaxaca, Cerro Azul (top), N of Niltepec, 7000 ft., 7 Mar 1956, *T. MacDougall s.n.* (Holotype MEXU 253131 (photo PTBG)).

Rondeletia macrocalyx Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 254. 1947. Type: GUATEMALA: Izabal, Cerro San Gil, 300–900 m, 25 Dec 1941, *J. A. Steyermark 41864* (Holotype F 1134224 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG), US). *Arachnothryx*.

Rondeletia manantlanensis Lorence, Novon 1: 145, *fig. 4A, B*. 1991. Type: MEXICO: Jalisco, Mun. de Autlán, Cañada del Laurelito, Las Joyas, 1850 m, 7 Dec 1985, *A. Vázquez 3750* (Holotype WIS (photo PTBG); Isotype IBUG, n.v.).

Rondeletia megalantha Lorence, Novon 4: 132, *fig. 8*. 1994. Type: HONDURAS: Cuyamel, 23 Aug 1924, *M. A. Carleton 653* (Holotype US 1208409; Isotype US 1208410).

Rondeletia mexiae Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 55. 1940. Type: MEXICO: Oaxaca, Distr. Choapan, Santa María, Montaña Santa María, 1500 m, 1 Apr 1938, *Y. Mexia 9261* (Holotype F 982856 (photos MEXU, PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG), UC (photo PTBG), US (photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia scabra** Hemsl.

Rondeletia mexicana (Turcz.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 388. 1940. *Siphonandra mexicana* Turcz., Bull. Soc. Imp. Naturalistes Moscou 21: 581. 1848. Type: MEXICO: Oaxaca, without precise locality, 3000 ft., Oct, *H. Galeotti 2664bis* (Holotype G-DEL, n.v. (photos F, MO, US); Isotype P (photos MEXU, PTBG; fragment F, photos MEXU, PTBG)).

Rondeletia microdon DC., Prodr. 4: 408. 1830. Type: CUBA: Havana, *de la Ossa s.n.* (Holotype G-DC, n.v. (microfiche IDC 800.691:III.7,8)).—**Psychotria microdon** (DC.) Urb.

Rondeletia minor Lundell, Wrightia 5: 326. 1976. Type: MEXICO: Veracruz, about 10 miles north of Teziutlán, 6 Jan 1964, *D. S. Correll & H. B. Correll 28736* (Holotype TEX-LL (photos MEXU, PTBG); Isotype MEXU). *Arachnothryx*.—**Rondeletia gracilispica** Standl.

Rondeletia monteverdensis Lorence, Novon 1: 147, *fig. 5A, B*. 1991. Type: COSTA RICA: Puntarenas, Monteverde, road to TV tower, 1700 m, 24 Aug 1985, *W. A. Haber 2340* (Holotype MO 3595758 (photo PTBG)).

Rondeletia myriantha Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 288. 1940. var. **myriantha**. Type: GUATEMALA: Suchitepéquez, Finca Moca, 3200 ft., 31 Oct 1934, *A. F. Skutch 1569* (Holotype F 813463 (photos MEXU, PTBG); Isotypes A, n.v., US (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia myriantha Standl. & Steyerm. var. **armentalis** L. O. Williams, Phytologia 26: 127. 1973. Type: GUATEMALA: Quiché, Nebaj, 5600 ft., 22 Nov 1934, *A. F. Skutch 1776* (Holotype F 815811 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia nebulosa Standl., Trop. Woods 37: 32. 1934. Type: HONDURAS: Tegucigalpa, La Aurora Trail, Rosario, San Juancito, 5400 ft., 2 Apr 1932, *J. B. Edwards P10* (Holotype F 662646 (photos MEXU, PTBG); Isotype A, n.v.). *Arachnothryx*.

Rondeletia nicaraguensis Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 43. 1853. Type: NICARAGUA: Matagalpa, Segovia, in monte Pantasmo, Jan 1848, *Oersted 11825* (Holotype C, n.v. (photos F, MO, US; fragment US)). *Arachnothryx*.

Rondeletia nitida Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: MEXICO: Chiapas, fl. rosâtres, forêts des pins, en fevr, *Linden 1660* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL (n.v.; fragment F), P (unnumbered *Linden* collection, almost certainly a duplicate; photos MEXU, PTBG)). Syntype: MEXICO: Chiapas, *Ghiesbreght 728* (K (photo PTBG), GH, n.v.). *Arachnothryx*. The *Linden 1660* collection at K is designated lectotype, because it has abundant flowers, and duplicates exist in two other herbaria. *Arachnothryx*.

Rondeletia oaxacana Standl., Field Mus. Nat. Hist., Bot. Ser. 11: 255. 1936. Type: MEXICO: Oaxaca, without precise locality, 3000 ft., Oct, *H. Galeotti 2664bis* (Holotype P (photos MEXU, PTBG), fragment F (photos MEXU, PTBG)). Nom. superfl. for and based on same type as *Rondeletia mexicana* (Turcz.) Standl. *Arachnothryx*.—**Rondeletia mexicana** (Turcz.) Standl.

Rondeletia odorata Jacq., Enum. Pl. 16. 1760. Type: CUBA: Havanna, coastal thickets, *Jacquin s.n.* (location unknown). Cultivated in Mesoamerica as an ornamental shrub.

Rondeletia odorata Jacq. var. *breviflora* Hook. f., Curtis Bot. Mag. 104, *tab. 6350*. 1878. Type: CUBA: Collector and locality unknown (presumably K, n.v.). Reported by Kirkbride (1969) to occur in Panama.—**Rondeletia odorata** Jacq.

Rondeletia ovandensis Lundell, Wrightia 5: 326. 1976. Type: MEXICO: Chiapas, Mt. Ovando, near Escuintla, 24 Oct 1941, *E. Matuda 6067* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F (photo PTBG), MEXU, TEX-LL, n.v.). *Arachnothryx*.

Rondeletia panamensis DC., Prodr. 4: 408. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype PR, n.v., fragment G-DC, n.v. (microfiche 4: 408, 8)).

Rondeletia pansamalana Standl., N. Amer. Fl. 32: 58. 1918. Type: GUATEMALA: Alta Verapaz, Pansamalá, 3800 ft., Apr 1886, *H. von Tuerckheim 897* (Holotype US 49985 (photos F, MEXU, PTBG); Isotype GH, n.v.). *Arachnothryx*.

Rondeletia phyllocephala Standl. & L. O. Williams, Ceiba 3: 63. 1952. Type: HONDURAS: Cortés, faldas húmedas de Montaña Sta. Ana, matorrales húmedos de Río Sta. Ana, 210 m, 6 Dec 1950, *A. Molina R. 3608* (Holotype US 2216049 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG, US), MO).—**Rondeletia thiemei** Donn. Sm.

Rondeletia pittieri K. Schum. & K. Krause ex K. Krause, Bot. Jahrb. Syst. 40: 316. 1908. Type: COSTA RICA: Bords du Río Porós, 2000 m, 10 Jan 1890, *H. Pittier & T. Durand 1729* (Holotype B, presumably destroyed (photos F, MO); Isotype US (photos MEXU, PTBG)). *Rogiera*.—**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia platysepala Standl., Ann. Missouri Bot. Gard. 27: 343. 1940. Type: PANAMA: Coclé, El Valle, North Rim, 600–1000 m, 14 May 1939, *P. H. Allen 1791* (Holotype F 989484 (photo PTBG); Isotypes F (photos MEXU, PTBG), G, n.v., GH, n.v., MO (photos MEXU, PTBG), NY, n.v.). *Arachnothryx*.—**Rondeletia bertieroides** Standl.

Rondeletia polycephala Standl., J. Wash. Acad. Sci. 17: 337. 1927. Type: MEXICO: Oaxaca, without precise locality, *F. Liebmann 11826* (Holotype C, n.v. (fragment US; photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia mexicana** (Turcz.) Standl.

Rondeletia povedae Lorence in W. C. Burger & C. M. Taylor, Fieldiana Bot., n.s. 33: 299. 1993. Type: COSTA RICA: San José, Santa Rosa de Puriscal, 17 Jan 1973, *L. J. Poveda 441* (Holotype CR 51260; Isotype MO 2211249).

Rondeletia pringlei Lorence, Novon 7: 54, *fig. 5*. 1997. Type: MEXICO: Veracruz, hills near Orizaba, 5000 ft., 9 Feb 1895, *C. G. Pringle 6135* (Holotype GH; Isotypes K, MEXU, MO, WU).

Rondeletia purpurea Lorence, Novon 1: 148, *fig. 6A–F, 7A, B*. 1991. Type: MEXICO: Oaxaca, Distr. de Ixtlán, Sierra de Juárez, Ruta 175 Tuxtepec a Oaxaca, a 5 km al N. de Vista Hermosa, 1175 m, 14 Apr 1982, *D. H. Lorence & R. Torres C. 4009* (Holotype MEXU (photo PTBG); Isotypes BM, F, MO, PTBG).

Rondeletia pyramidalis Lundell, Wrightia 5: 327. 1976. Type: MEXICO: Chiapas, San Luis, near Siltepec, 1300 m, 24 Jan 1945, *E. Matuda 5292* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F, MEXU, TEX-LL, n.v.). *Arachnothryx*.

Rondeletia rekoi Standl., Proc. Biol. Soc. Wash. 8: 126. 1918. Type: MEXICO: Oaxaca, Las Pilas (Cerro Espino), 400 m, 10 Oct 1917, *B. P. Reko 3490* (Holotype US 867145 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia repens L., Syst., ed. 10, 2: 928. 1759. Type: JAMAICA: *Sloane s.n.* (Lectotype: Sloane herb. iv.111, n.v.; designated by Howard, 1989).—**Geophila repens** (L.) I. M. Johnst.

Rondeletia ricoi Lorence, Novon 1: 152, *fig. 8E, F, 9A, B*. 1991. Type: MEXICO: Oaxaca, Distr. de Putla de Guerrero, a 10 km al NE de Putla, 950 m, 9 Dec 1982, *L. Rico A., E. M. Martínez & O. Téllez V. 566* (Holotype MEXU (photo PTBG); Isotypes BM, F, MO, PTBG).

Rondeletia roezlii (Planch.) Hemsl., Diag. Pl. Nov. Mexic. 25. 1879. *Rogiera roezlii* Planch., Fl. Serr. Jard. 5: tab. 442. 1849. Type: Based on cultivated material grown in Belgium, probably of Guatemalan origin (type not designated).—**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia rothschuhii Loes., Engl. Bot. Jahrb. 60: 369. 1926. Type: NICARAGUA: Matagalpa, Cañada Yucul, 1000 m, *Rothschuh 592* (B, presumably destroyed (photos F, MO; fragment F)).—**Rondeletia buddleioides** Benth.

Rondeletia rubens L. O. Williams, Phytologia 26: 128. 1973. Type: GUATEMALA: Quiché, Nebaj, 6000 ft., 19 Nov 1934, *A. F. Skutch 1725* (Holotype F 815804 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia rufescens B. L. Rob., Proc. Amer. Acad. Arts 45: 402. 1910. Type: GUATEMALA: Alta Verapaz, Cobán, 4800 ft., Mar 1881, *H. von Tuerckheim 582* (Holotype GH, n.v.; Isotypes F, K (photo PTBG), P (photos MEXU, PTBG), US (2 sheets; photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia gracilis** Hemsl.

Rondeletia rufescens B. L. Rob. var. *ovata* B. L. Rob., Proc. Amer. Acad. Arts 45: 403. 1910. Type: GUATEMALA: Alta Verapaz, Tactic, 1800 m, Mar 1903, *H. von Tuerckheim 8401* (Holotype GH, n.v.; Isotypes F (2 sheets), US

(photos MEXU, PTBG)).—**Rondeletia gracilis** Hemsl.

Rondeletia rugosa Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 43. 1853. Type: COSTA RICA: Cartago, 5600 ft., *Oersted s.n.* [=*Plantae centroamericanae Oersted 11828*] (Holotype C, n.v.; Isotype US (photo PTBG)).—**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia rzedowskii Lorence, Novon 1: 154, *fig. 10*. 1991. Type: MEXICO: Guerrero, Mun. de Atoyac, Puerto de la Piedra Acanalada, 1930 m, 6 Jan 1984, *Laboratorio de Biogeografía 867* (Holotype MEXU 364217 (photo PTBG); Isotypes FCME, MEXU (photo PTBG)).

Rondeletia salicifolia Dwyer & Hayden, Phytologia 15: 58. 1967. Type: PANAMA: Panamá, Cerro Jefe in Clusia forest at 2700–3000 ft., 27 Jan 1966, *E. L. Tyson, J. D. Dwyer & K. Blum 3319* (Holotype MO 1824503 (photo PTBG); Isotypes F, US (photos MEXU, MO)). *Arachnothryx*.—**Rondeletia bertieroides** Standl.

Rondeletia salicifolia Dwyer & Hayden subsp. *brevicorolla* J. H. Kirkbr., Ann. Missouri Bot. Gard. 55: 383. 1968. Type: PANAMA: Bocas del Toro, cloud forest above Quebrada Huron on Cerro Bonyik, 166–400 m, 13 Apr 1968, *J. H. Kirkbride, Jr. & J. A. Duke 597* (Holotype MO 1946832 (photo PTBG); Isotypes NY, n.v., US (2 sheets; photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia bertieroides** Standl.

Rondeletia scabra Hemsl., Diag. Pl. Nov. Mexic. 29. 1879. Type: MEXICO: Oaxaca, Sierra San Pedro Nolasco, Talea etc., *C. Jurgensen 926* (Holotype K (photo PTBG)).

Rondeletia schumanniana K. Krause, Bot. Jahrb. 40: 315. 1908. Type: PANAMA: Veraguas, Mar 1906, *J. von Warszewicz 1168* (B, presumably destroyed (photo F; fragment F)).—**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia scoti Lorence, Novon 1: 155, *fig. 8A, B*. 1991. Type: MEXICO: Oaxaca, La Glorieta-Río Grande (N slope), 12 Mar 1953, *T. MacDougall s.n.* (Holotype MEXU (photo PTBG); Isotypes MO, PTBG).

Rondeletia secunda Standl., Contr. U.S. Natl. Herb. 18: 141. 1916. Type: PANAMA: San Blas, forests around Puerto Obaldía, San Blas Coast, 0–50 m, Aug 1911, *H. Pittier 4279* (Holotype US 679392 (photos F, MEXU, PTBG); Isotype NY, n.v.). *Arachnothryx*.

Rondeletia secundiflora B. L. Rob., Proc. Amer. Acad. Arts 45: 403. 1910. Type: GUATEMALA: In woods along road from Patín to Escuintla, 21 Jul 1860, *S. Hayes s.n.* (Holotype GH, n.v.; Isotype K (photo PTBG)). *Arachnothryx*.

Rondeletia seleriana Loes., Verh. Bot. Ver. Brandenb. 65: 105. 1923. Type: GUATEMALA: Huehuetenango, Nentón Distr., near Chaculá, *E. Seler & C. Seler 3015* (Holotype B, presumably destroyed (photos F, MO, US), fragment F). *Rogiera*.—**Rondeletia gratissima** (Planch. & Lindl.) Hemsl.

Rondeletia septicidalis B. L. Rob., Proc. Amer. Acad. Arts 45: 403. 1910. Type: MEXICO: Chiapas, Chicharras, 3000–6000 ft., 6 Feb 1896, *E. W. Nelson 3755* (Holotype US 256722 (photos MEXU, PTBG); Isotype GH, n.v.). *Arachnothryx*.

Rondeletia silvicola L. O. Williams, Phytologia 26: 128. 1973. Type: HONDURAS: Atlántida, Lancetilla Valley, near Tela, 20–600 m, 6 Dec 1927–20 Mar 1928, *P. C. Standley 56885* (Holotype F 581955 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia skutchii Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 289. 1940. Type: GUATEMALA: Suchitepequez, Finca Mocá, 4200 ft., 10 Jan 1935, *A. F. Skutch 2110* (Holotype F 934088 (photos MEXU, PTBG); Isotypes A, n.v., US (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia spinosa K. Schum. ex Loes., Bull. Herb. Boissier 3: 620. 1895. Type: MEXICO: Hidalgo, prope Huejutla, Apr, *E. Seler & C. Seler 668* (Holotype B, presumably destroyed).—**Status uncertain**, possibly **Randia** sp. The protologue diagnosis states branches armed with paired spines and flowers solitary or fascicled.

Rondeletia stachyoidea Donn. Sm., Bot. Gaz. (Crawfordsville) 42: 298. 1906. Type:

GUATEMALA: Alta Verapaz, Semococh, 600–900 m, 25 Apr 1905, *R. Hay s.n.* (Holotype US 473726 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia standleyana A. R. Molina, Ceiba 1: 262. 1951. Type: HONDURAS: Morazán, in pine forest above Zambrano, 1200 m, 20 Jul 1949, *L. O. Williams & A. Molina R. 14417* (Holotype US 2216018 (photos MEXU, PTBG); Isotypes F (photos MEXU, PTBG, US), US). *Arachnothryx*.

Rondeletia stenosiphon Hemsl., Diag. Pl. Nov. Mexic. 26. 1879. Type: MEXICO: Without precise locality, Yucatán & Tabasco [sic], *E. P. Johnson s.n.* (Holotype K (photo PTBG)). *Rogiera*.

Rondeletia stenostachya Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1372. 1938. Type: COSTA RICA: La Hondura de San José, 1300 m, 15 Aug 1933, *M. Valerio 769* (Holotype F 681816 (photos MEXU, PTBG)). *Arachnothryx*.—**Gonzalagunia stenostachya** (Standl.) W. C. Burger

Rondeletia strigosa (Benth.) Hemsl., Diag. Pl. Nov. Mexic. 27. 1879. *Bouvardia strigosa* Benth., Pl. Hartweg. 75. 1841. Type: GUATEMALA: [Volcán] Zunil, Nov, *T. Hartweg 530* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL, n.v. (fragment F), P (photos F, MEXU, MO, PTBG), W, n.v. (photos F, MO)). Syntype: GUATEMALA: Volcán de Fuego, 6000–6400 ft., *Salvin s.n.* (K (photo PTBG; fragment F)). *Rogiera*. The K collection of *Hartweg 530* is a good, representative choice for lectotype and in addition has duplicates in three herbaria.

Rondeletia subscandens Lundell, Wrightia 5: 328. 1976. Type: GUATEMALA: Petén, La Cumbre, about 500 m west of km 142/143 of the Cadenas Road, 10 Sep 1976, *C. L. Lundell & E. Contreras 19830* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes F (2 sheets; photos MO), K (photo PTBG)). *Rogiera*.

Rondeletia suffrutescens Brandegee, Univ. Calif. Publ. Bot. 6: 70. 1914. Type: MEXICO: Chiapas, Cerro del Boquerón, Aug 1913, *C. A. Purpus 6704* (Holotype UC 172451, n.v.; Isotypes F (photos MEXU, PTBG), MO, US (photos MEXU, PTBG)). *Rogiera*.

Rondeletia tacanensis Lundell, Bull. Torrey Bot. Club 66: 603. 1939. Type: MEXICO: Chiapas, Volcán Tacaná West, 2800 m, 30 Mar 1939, *E. Matuda 2928* (Holotype TEX-LL (photos MEXU, PTBG); Isotypes A, n.v., F (photos MEXU, PTBG), GH, n.v., K (photo PTBG), MEXU, US (2 sheets; photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia taylorae Lorence in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 300. 1993. Type: COSTA RICA: Limón, Cañón de Limón, El Progreso. Fila Matama, Valle de la Estrella, 9°47'18"N, 83°08'45"W, 1350 m, 19 Apr 1989, *G. Herrera & A. Chacón 2656* (Holotype CR; Isotypes MO, PTBG).

Rondeletia tenorioi Lorence, Novon 1: 156, *fig. 11A, B*. 1991. Type: MEXICO: Oaxaca, Distr. de Juxtlahuaca, 19 km al SW de Juxtlahuaca y a 5 km en la misma dirección de Sta. Ma. Asunción, 1900 m, 4 Apr 1982, *P. Tenorio & R. Torres C. 184* (Holotype MEXU (photo PTBG); Isotypes BM, F, MO).

Rondeletia thiemei Donn. Sm., Bot. Gaz. (Crawfordsville) 42: 299. 1906. Type: HONDURAS: Santa Bárbara, Río Chamelecón, 400 m, 16 Dec 1888, *C. Thieme 5276* (Holotype US 941403 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia torresii Standl., J. Wash. Acad. Sci. 18: 163. 1928. Type: COSTA RICA: Alajuela, Viento Fresco, 1600–1900 m, 13 Feb 1926, *P. C. Standley & R. Torres R. 47839* (Holotype US 1305295 (photos MEXU, PTBG)). *Arachnothryx*.

Rondeletia tuxtlensis Lorence & Cast.-Campos, Biotica 13: 148, *fig. 1*. 1988. Type: MEXICO: Veracruz, Mun. Mecayapan, Volcán San Martín Pajapan al sur del Ejido La Valentina, 700 m, 8 May 1985, *J. I. Calzada 11183* (Holotype XAL; Isotypes F, MEXU, MO (photo PTBG)). *Arachnothryx*.

Rondeletia urophylla Standl. & L. O. Williams, Phytologia 26: 129. 1973. Type: COSTA RICA: Puntarenas, Esquinas forest, 30 m, 3 Aug 1951, *P. H. Allen 6291*

(Holotype F 1562934 (photos MEXU, PTBG); Isotype EAP, n.v.).

Rondeletia uxpanapensis Lorence & Cast.-Campos, Biotica 13: 150, *fig. 2*. 1988. Type: MEXICO: Veracruz, Mun. Hidalgotitlán, zona de Uxpanapa; Río Solosuchil a 5–6 km ESE de Hermanos Cedillo, 100–200 m, 24 Mar 1982, *D. H. Lorence et al. 3909* (Holotype MEXU (photo PTBG); Isotypes BM, ENCB, CHAPA, MO, NY, PTBG, UC, XAL). *Arachnothryx*.

Rondeletia versicolor J. E. Sm., Bot. Mag. 7: *tab. 4579*. 1851. Type: Based on cultivated material grown at Kew, sent by Seemann from Boquete, Veraguas, Panama (type not designated). *Rogiera*.—**Rondeletia amoena** (Planch.) Hemsl.

Rondeletia villosa Hemsl., Diag. Pl. Nov. Mexic. 27. 1879. Type: MEXICO: Oaxaca, San Pedro Nolasco, etc., *Jurgensen 806* (Lectotype K, here designated (photo PTBG); Isolectotypes G-DEL, n.v. (fragment F), K (photo PTBG), P (photos MEXU, PTBG)). Syntypes: MEXICO: Oaxaca, Trapiche de Concepción, *F. Liebmann 70* (K (photo PTBG), G-DEL, n.v. (fragment F)). Tabasco, arbuste à fleurs blanches en novembre et Xbre., environs de Teapa (Tabasco), 1839, *Linden 145* (K (photo PTBG); probable syntypes G-DEL, n.v. (fragment F), P (photos MEXU, PTBG)). *Arachnothryx*. The K sheet of *Jurgensen 806* is designated as lectotype, because it is representative and has flowers and fruits, with duplicates in three other herbaria.

Rondeletia volubilis Sessé & Moç., Pl. Nov. Hisp. 36. 1887. Type: MEXICO: Habit in Acahuizotla, *Sessé & Moçiño 1393* (Holotype MA, n.v. (photo WU); Isotype F, fragment, n.v.). Calque of Fl. Mexic. Ic. 275 (G-DC, n.v. (photo MO)). For typification, see Puff (1991: 326).—**Paederia ciliata** (Bartl. ex DC.) Standl.

Rondeletia vulcanicola Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 291. 1940. Type: GUATEMALA: Quezaltenango, Finca Pireneos, lower south-facing slopes of Volcán Santa María, between Santa María de Jesús and Calahuaché, 1300–1500 m, 31 Dec 1939, *J. A. Steyermark 33220* (Holotype F 1041786 (photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia secundiflora** B. L. Rob.

Rondeletia wendtii Lorence & Cast.-Campos, Biotica 13: 154, *fig. 3*. 1988. Type: MEXICO: Oaxaca, Distr. Juchitán, Mun. de Santa María Chimalapa, Arroyo Chocolín, Población de Nicolás Bravo, cerca del Rancho de Agustín Montero, 3–4 km al sur de la Población de Río Alegre (Veracruz), 150 m, 21 Oct 1983, *T. Wendt, A. Montero & I. Almaraz 4244* (Holotype MEXU (photo PTBG); Isotypes CHAPA, PTBG). *Arachnothryx*.

Rondeletia yucatanensis Lundell, Wrightia 5: 329. 1976. Type: MEXICO: Yucatán, Chichen Itza, 28 Apr 1950, *J. T. Baldwin, Jr. 14230* (Holotype TEX-LL). *Arachnothryx*. Note: the type was likely collected from a cultivated plant outside its normal range, as this species is commonly cultivated in many parts of Mexico for its nocturnally fragrant flowers.—**Rondeletia leucophylla** Kunth in Humb., Bonpl. & Kunth.

Rondeletia zolleriana Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 292. 1940. Type: GUATEMALA: San Marcos, between Finca El Porvenir and Loma Corona, 9 mi. NW of El Porvenir, southwest-facing slopes of Volcán Tajumulco, 1300–2000 m, 14 Mar 1940, *J. A. Steyermark 37738* (Holotype F 1039668 (photos MEXU, PTBG)). *Arachnothryx*.—**Rondeletia brandegeeana** Lorence

Rosenbergiodendron Fagerl., Svensk Bot. Tidskrift. 42: 150. 1948. Type: Rosenbergiodendron formosum (Jacq.) Fagerl.

Rosenbergiodendron formosum (Jacq.) Fagerl., Svensk Bot. Tidskrift. 42: 152. 1948. *Mussaenda formosa* Jacq., Enum. Pl. Carib. 16. 1760. Type: COLOMBIA: Bolívar, Cartagena, *Jacquin s.n.* (Holotype G, n.v.).

Rubia L., Sp. Pl. 1: 109. 1753. Type: Rubia tinctorum L.

Rubia acuminata M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 127. 1844. Type: MEXICO: Puebla, Tehuacán, 5000 ft., *H. Galeotti 2362* (Lectotype K, n.v. (photo MO); designated by Dempster, 1973b). —**Galium aschenbornii** S. Schauer

Rubia diphylla Sessé & Moç., Fl. Mexic. 23. 1893. Type: Habitat in anfractibus Santi Angeli et Hortis Sancti Augustini. Floret Julio, *Sessé & Moçiño s.n.* (presumably MA, n.v.). —**Status uncertain**, probably **Didymaea** sp.

Rubia hypocarpia (L.) DC., Prodr. 4: 591. 1830. *Valantia hypocarpia* L., Syst. Nat., ed. 10, 1307. 1759. Type: JAMAICA: Rubia I, Browne, Hist. Jamaica 141 (Holotype LINN, n.v.). *Relbunium*.—**Galium hypocarpium** (L.) Endl. ex Griseb.

Rubia incana Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 338. 1820. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (Holotype presumably B, n.v.; Isotype P, n.v. (photo MO)).—**Galium hypocarpium** (L.) Endl. ex Griseb.

Rubia laevigata DC., Prodr. 4: 591. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v.). *Relbunium*.—**Galium microphyllum** A. Gray

Rudgea Salisb., Trans. Linn. Soc. London 8: 327. 1807. Type: Rudgea lanceaefolia Salisb.

Rudgea amplexicaulis Dwyer, Ann. Missouri Bot. Gard. 67: 475. 1980. Type: PANAMA: Chiriquí, above San Félix along mining road 18–27 mi. off Pan-Am. Highway (above Chame or turnoff to Escopeta), 1200–1500 m, 12 Mar 1976, *T. B. Croat 33133* (Holotype MO 2399080 (photo PTBG); Isotype MO).

Rudgea ceratopetala Donn. Sm., Bot. Gaz. (Crawfordsville) 35: 3. 1903. Type: GUATEMALA: Alta Verapaz, Cubliquitz, 340 m, 1901, *H. von Tuerckheim 7904* (Holotype US 943480 (photos MEXU, PTBG); Isotypes F, n.v., US (2 sheets; photos MEXU, PTBG)).—**Rudgea cornifolia** (Kunth) Standl.

Rudgea chiriquiensis Dwyer, Ann. Missouri Bot. Gard. 67: 476. 1980. Type: PANAMA: Chiriquí, Cerro Colorado, along road above San Félix, 29 km above bridge over Río San Félix (7.9 km above turnoff to Escopeta), 1500 m, 14 Jul 1976, *T. B. Croat 37071* (Holotype MO 2798805 (photo PTBG); Isotype MO).—**Psychotria nebulosa** (Dwyer) C. M. Taylor

Rudgea cornifolia (Humb. & Bonpl. ex Roem. & Schult.) Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 432. 1931. *Psychotria cornifolia* Humb. & Bonpl. ex Roem. & Schult., Syst. Veg. 5: 191. 1819; Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 362. 1819. Type: VENEZUELA: Near Maipures, on the Orinoco, *Humboldt & Bonpland 893* (Holotype B-WI, n.v. (photo MO)).

Rudgea coronicarpa Dwyer, Ann. Missouri Bot. Gard. 67: 478. 1980. Type: PANAMA: Coclé, Cerro Pilón, 2700 ft., 9 Jan 1972, *A. Gentry & J. D. Dwyer 3647* (Holotype MO 2176970 (photo PTBG); Isotype MO).

Rudgea fimbriata (Benth.) Standl. in Standl. & Calderón, Lista Prelim. Pl. El Salvador 274. 1925. *Psychotria fimbriata* Benth., J. Bot. Hook. 3: 226. 1841. Type: GUYANA: Essequibo River, *Schomburgk 51* (Holotype presumably K, n.v.).—**Rudgea cornifolia** (Kunth) Standl.

Rudgea hemisphaerica Dwyer ex C. M. Taylor, Novon 6: 302, *fig. 3A, B*. 1996. Type: PANAMA: El Llano–Cartí Road, 19.1 km from Interamerican Highway, 9°19'N, 78°55'W, 350 m, 5 Mar 1985, *G. de Nevers, H. Herrera & S. Charnley 4962* (Holotype PMA 38235, n.v.; Isotype MO 4658113).

Rudgea horquetensis Dwyer & Hayden, Ann. Missouri Bot. Gard. 54: 145. 1967. Type: PANAMA: Chiriquí, Cerro Horqueta, 6500 ft., *von Hagen & von Hagen 2156* (Holotype NY, n.v.).

Rudgea isthmensis Standl., Ann. Missouri Bot. Gard. 26: 313. 1929. Type: PANAMA: Canal Zone, vicinity of Salamanca Hydrographic Station, Río Pequeni, 80 m, 28–29 Jul 1938, *R. E. Woodson, Jr., P. H. Allen & R. J. Seibert 1618* (Holotype MO 1169548 (photo PTBG); Isotypes A, n.v., NY, n.v., US (photos MEXU, PTBG)).

Rudgea laevis C. M. Taylor, Novon 5: 207, *fig. 1F, G.* 1995. Type: COSTA RICA: Puntarenas, Monteverde, Bajos de La Lindora, Río Guacimal, 10°18'N, 84°48'W, 19 Feb 1988, *W. Haber & E. Bello 8271* (Holotype CR, n.v.; Isotype MO no 3646480).

Rudgea magna Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 56. 1940. Type: PANAMA: San Blas Coast, hills of Sperdi, near Puerto Obaldía, 20–200 m, Sep 1911, *H. Pittier 4350* (Holotype F 600258 (photo PTBG)).

Rudgea mandevilliifolia Dwyer ex C. M. Taylor, Novon 6: 304, *fig. 3C, D.* 1996. Type: PANAMA: Chiriquí, vicinity of Planes de Hornito beyond Gualaca, ca. 23 km E of Finca Linares, 1400–1900 m, 28 Nov 1979, *T. B. Croat 48863* (Holotype MO 3615290).

Rudgea mcphersonii Dwyer ex C. M. Taylor, Novon 6: 304, *fig. 3E, F.* 1996. Type: PANAMA: Colón, Santa Rita ridge, SE of Colón, 10–11 road-miles from trans-isthmian highway, 9°25'N, 79°40'W, 450 m, 18 Sep 1987, *G. McPherson 11771* (Holotype PMA, n.v.; Isotype MO 3646497).

Rudgea monofructus Gómez-Laur. & Dwyer, Novon 1: 50, *fig. 1.* 1991. Type: COSTA RICA: Alajuela, Reserva Forestal de San Ramon, Campamento Río San Lorencito, 900–1100 m, 25 Sep 1989, *J. Gómez-Laurito & G. Vargas 11822* (Holotype UCR, n.v.; Isotype MO).

Rudgea panamensis (Dwyer) C. M. Taylor, Novon 6: 305. 1996. *Cephaëlis panamensis* Dwyer, Ann. Missouri Bot. Gard. 67: 77. 1980. Type: PANAMA: Colón, Río Guanche, ca. 2.5 km upriver from bridge on road to Portobelo, 10–100 m, 14 Dec 1974, *S. Mori & J. Kallunki 3714* (Holotype MO 2353037 (photos MEXU, PTBG); Isotypes MO 2353038 (photos MEXU, PTBG), PMA 22701, n.v.).

Rudgea pittieri Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 211. 1940. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre de Dios), 10–100 m, Jul–Aug 1911, *H. Pittier 3855* (Holotype F 636043 (photo PTBG); Isotypes F, US).

Rudgea raveniana W. C. Burger in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 304. 1993. Type: COSTA RICA: Rincón de Osa, *W. Burger & R. Liesner 7251* (Holotype CR, n.v.; Isotype F, n.v.).

Rudgea reducticalyx Dwyer in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 304. 1993. Type: COSTA RICA: Alajuela, along road between Canas and Upala, 4 km NNE of Bijagua on slopes leading into Río Zapote, 400 m, 24 Jun 1976, *T. B. Croat 36330* (Holotype CR, n.v.; Isotype MO 2481680 (photo PTBG)).

Rudgea sanblasensis C. M. Taylor, Novon 6: 220. 1996. Type: PANAMA: San Blas, Río Playón Chico, Dukandi, vecinidad de la Isla Playón Chico, 09°15'N, 78°15'W, 30 m, 6 Sep 1993, *H. Herrera et al. 1358* (Holotype MO 4671394; Isotype PMA, n.v.).

Rudgea simiarum Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 389. 1940. Type: GUATEMALA: Izabal, between Virginia and Lago de Izabal, Montaña del Mico, 50–500 m, 5 Apr 1940, *J. A. Steyermark 38839* (Holotype F 1042936 (photo PTBG)).—**Psychotria** cf. **eurycarpa** Standl.

Rudgea skutchii Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 18: 1374. 1938. Type: COSTA RICA: San José, vicinity of El General, 915 m, Aug 1936, *A. F. Skutch 2836* (Holotype US 1642550 (photos MEXU, PTBG); Isotypes GH, n.v., MO (photos MEXU, PTBG)).

Rudgea thyrsiflora Donn. Sm., Bot. Gaz. (Crawfordsville) 61: 375. 1916. Type: COSTA RICA: Talamanca, Forêts de Tsâki, 200 m, Apr 1895, *A. Tonduz 9579* (Holotype US 943477 (photos MEXU, PTBG); Isotype BR, n.v.).—**Psychotria stenostachya** Standl.

Rudgea trifurcata Gómez-Laur., Brenesia 33: 139. 1990 (1991). Type: COSTA RICA: Limón, Talamanca, 3 km al oeste de Volio, 9°37'40N, 82°53'50W, 100 m. *J. Gómez-Laurito & G. Vargas 11957* (Holotype CR, n.v.; Isotypes F, n.v., MO, US, n.v.))

Rustia Klotzsch in Hayne, Getr. Darstell. Gew. 14: sub *tab. 14, 15*. 1846. Lectotype: Rustia formosa (Cham. & Schltdl.) Klotzsch (=*Exostema formosum* Cham. & Schltdl.).

Rustia costaricensis (Standl.) Lorence in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 306. 1993. *Stomandra costaricensis* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 247. 1947. Type: COSTA RICA: San José, basin of El General, 675–900 m, Mar 1940, *A. F. Skutch 4777* (Holotype F 1044344 (photo PTBG); Isotypes MO (photo PTBG), US).

Rustia dressleri Delprete, Novon 5: 137. 1995. Type: PANAMA: Panamá, El Llano–Cartí highway, 8–10 km N of El Llano, 31 Aug 1974, *R. L. Dressler 4703* (Holotype MO 2268783).

Rustia ferruginea Standl., Contr. U.S. Natl. Herb. 18: 142. 1916. Type: PANAMA: Colón, along Río Fató, 10–100 m, Aug 1911, *H. Pittier 4201* (Holotype US 679302 (photos MEXU, PTBG)).

Rustia occidentalis (Benth.) Hemsl., Biol. Centr.-Amer., Bot. 2: 14. 1881. *Exostemma occidentale* Benth., Bot. Voy. Sulphur 104. 1844. Type: PANAMA: Without precise locality, *Barclay s.n.* or *Hinds s.n.* (Holotype K, n.v.).

Rustia panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 483. 1980. Type: PANAMA: Veraguas, Valley of Río Dos Bocas, 11 km from Escuela Agrícola Alto Piedra (above Santa Fé), on road to Calovébora, 450 m, 30 Aug 1974, *T. B. Croat 27508* (Holotype MO 2214602; Isotypes F (photo PTBG), GH, n.v.).—**Rustia costaricensis** (Standl.) Lorence

Sabicea Aubl., Hist. Pl. Guiane 192. 1775. Type not designated.

Sabicea ambigua Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 49. 1930. Type: COLOMBIA: Without precise locality, 1847, *Triana s.n.* (Holotype K, n.v. (photo F)). —**Amphidasya ambigua** (Standl.) Standl.

Sabicea costaricensis Wernham, Monogr. Sabicea 31. 1914. Syntypes: COSTA RICA: Buenos Aires, buissons, 300 m, Jan 1893, *H. Pittier 6712* [on label "H. Pittier" is crossed out and "Tonduz" is written in] (US 1393299 (photos MEXU, PTBG)). On the Savannah, *H. Pittier 4025* (BM, n.v.; Isosyntypes K, n.v., BR, n.v., G, n.v.).—**Sabicea panamensis** Wernham

Sabicea flagenioides Wernham, Monogr. Sabicea 57. 1914. Type: MEXICO: Yucatán, Chichankanab, *G. F. Gaumer 1432* (Holotype F, n.v.; Isotype B, presumably destroyed). —**Status uncertain.**

Sabicea hirsuta Kunth in Humb., Bonpl. & Kunth var. *adpressa* Wernham, Monogr. Sabicea 55. 1914. Syntypes: PANAMA: Isthmus of Panama, Chagres, Jan–Mar 1850, *A. Fendler 180* (F, (photo PTBG), BM, n.v., W, n.v., fragment F); same locality, *Hayes s.n.* (n.v.), same locality, *Seemann 1073* (n.v.). COSTA RICA: Limón, *Kuntze 1995* (n.v.); Punta Arena, *Tonduz 6712* (n.v.), *Tonduz 9955* (n.v.); six additional syntypes are cited from St. Thomas, Trinidad, and Brazil.

Sabicea mexicana Wernham, Monogr. Sabicea 41. 1914. Syntypes: MEXICO: Oaxaca, without precise locality, 3000 ft., *H. Galeotti 2662* (K, n.v. (photo MO), B, n.v., BR, n.v., G, n.v., P, n.v., W, n.v.). Without precise locality, *F. Liebmann 43* (K, n.v., BR, n.v.).

Sabicea panamensis Wernham, Monogr. Sabicea 30. 1914. Type: PANAMA: Chagres, Isthmus of Panama, Mar 1850, *A. Fendler 181* (Holotype K, n.v.; Isotypes US, 2 sheets (photos MEXU, PTBG)).

Sabicea stellaris Dwyer, Ann. Missouri Bot. Gard. 67: 489. 1980. Type: PANAMA: Panamá, Río Pequeni, 10–15 minutes upstream from hydrographic station by motor, 11 Dec 1974, *R. L. Dressler 4887* (Holotype MO 2353169 (photo PTBG)).

Sabicea villosa Willd. ex Roem. & Schult., Syst. Veg. 5: 265. 1819. var. **villosa**. Type: VENEZUELA: Orinoco River, *A. Bonpland s.n.* (Holotype presumably B-WI, n.v.).

Sabicea villosa Willd. ex Roem. & Schult. var. **adpressa** (Wernham) Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 52. 1930. Syntypes: PANAMA: Isthmus of Panama,

Chagres, Jan–Mar 1850, *A. Fendler 180* (F, (photo PTBG), BM, n.v., W, n.v., fragment F); same locality, *Hayes s.n.* (n.v.), same locality, *Seemann 1073* (n.v.). COSTA RICA: Limón, *Kuntze 1995* (n.v.); Punta Arena, *Tonduz 6712* (n.v.), *Tonduz 9955* (n.v.); six additional syntypes are cited from St. Thomas, Trinidad, and Brazil.

Schradera Vahl, Eclog. Amer. 1: 35. 1796, nom. cons. Type: Schradera capitata Vahl, nom. illeg. (=*Schradera involucrata* (Sw.) K. Schum.)

Schradera blumii Dwyer & Hayden, Phytologia 15: 59. 1967. Type: PANAMA: Panamá, Cerro Jefe in *Clusia* forest at 2700–3000 ft., 27 Jan 1966, *E. L. Tyson, J. Dwyer & K. Blum 3218* (Holotype MO 1831023 (photo PTBG)).

Schradera costaricensis Dwyer in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 33: 309. 1993. Type: COSTA RICA: Alajuela, Bijagua, *G. Herrera 2004* (Holotype CR, n.v.; Isotypes F, n.v., MO).

Serissa Comm. ex Juss., Gen. 209. 1789. Type: Serissa foetida Comm. ex Juss.

Serissa japonica (Thunb.) Thunb., Nov. Gen. Pl. 132, *pl. 9*. 1798. Type: JAPAN: Collector unknown (presumably UPS, n.v.). *Lycium japonicum* Thunb., Nov. Act. Roy. Soc. Upsal. 3: 207. 1780. Cultivated at least in Costa Rica and Panama.

Sherardia L., Sp. Pl. 1: 102. 1753. Type: Sherardia arvensis L.

Sherardia arvensis L., Sp. Pl. 1: 102. 1753. Type: Habitat in arvensis Scaniae, Germaniae, Angliae, (Lectotype *Sherard*, Herb. Clifford 33: *Sherardia* 1 (BM, n.v.); designated by Natali in Jarvis et al., 1993: 88). Naturalized at least in Veracruz and Costa Rica.

Sickingia Willd., Ges. Naturf. Freunde Berlin Neue Schrift. 3: 445. 1801. Type not designated. [Herein treated as a synonym of *Simira* Aubl.]

Sickingia calderoniana Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 214. 1940. Type: EL SALVADOR: Jayaque, finca del Dr. Zárate, 9 Jan 1939, *M. L. Van Severén 66* (Holotype F 1033327 (photo PTBG); Isotype F).—**Simira calderoniana** (Standl.) Steyerm.

Sickingia klugei (Standl.) Standl., Trop. Woods 22: 10. 1930. *Calderonia klugei* Standl., J. Wash. Acad. Sci. 15: 6. 1924. Type: PANAMA: Panamá, near Chepo, 1924, *H. C. Kluge 19* (Yale 7132) (Holotype US 1206424 (photos MEXU, PTBG); Isotype F (plus another probable isotype at F, a fruiting collection from type tree, *Kluge s.n.*, also Yale 7132)).—**Simira klugei** (Standl.) Steyerm.

Sickingia lancifolia Lundell, Wrightia 4: 50. 1968. Type: GUATEMALA: Petén, Laguna Petexbatun, in high forest bordering lake, on Escarbadero, 2 Apr 1964, *C. L. Lundell 18224* (Holotype TEX-LL, n.v.; Isotype US (photos MEXU, PTBG)).—**Simira salvadorensis** (Standl.) Steyerm.

Sickingia lancifolia Lundell var. *puberula* Lundell, Wrightia 4: 50. 1968. Type: GUATEMALA: Petén, Lacandón, in bajo, about 1 km, 700 m south, 12 Mar 1962, *E. Contreras 3514* (Holotype TEX-LL, n.v.). —**Simira salavadorensis** (Standl.) Steyerm.

Sickingia maxonii (Standl.) Standl., Trop. Woods 14: 30. 1928. *Genipa maxonii* Standl., J. Wash. Acad. Sci. 8: 642. 1918. Type: PANAMA: Panamá, Canal Zone, forest along the Río Indio de Gatún, near sea level, 17 Feb 1911, *W. R. Maxon 4848* (Holotype US 675223 (photos MEXU, PTBG)).—**Simira maxonii** (Standl.) Steyerm.

Sickingia mexicana Bullock in Hook. Icon., ser. 4, 4: *tab. 3321*. 1936. Type: MEXICO: México, Distr. Temascaltepec, Luvianos, 26 Sep 1933, *G. B. Hinton 4818* (Holotype K, n.v.; Isotype US (photos MEXU, PTBG)). —**Simira mexicana** (Bullock) Steyerm.

Sickingia mollis Lundell, Contr. Univ. Michigan Herb. 4: 32. 1940. Not *Sickingia mollis* Standl., 1936. Type: MEXICO: Tabasco, Reforma, on the Río San Pedro de Mártir, above Balancán, 22–26 May 1939, *E. Matuda 3161* (Holotype MICH, n.v.; Isotypes A, n.v.,

TEX-LL (photos MEXU, PTBG), US (photo PTBG)).—**Simira salvadorensis** (Standl.) Steyerm.

Sickingia multiflora Lundell, Wrightia 5: 258. 1976. Type: GUATEMALA: Petén, Tikal National Park, Tikal, in ramonal covering the ruins, on Temple IV, 11 Jul 1960, *E. Contreras 1239* (Holotype TEX-LL (photos MEXU, PTBG); Isotype US (photos MEXU, PTBG)).—**Simira salvadorensis** (Standl.) Steyerm.

Sickingia myriantha Standl., Pub. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Type: COLOMBIA: Magdalena, Las Nubes road, region of Santa Marta, 1200 m, 3 Dec 1898, *H. H. Smith 1810* (Holotype F 138660; Isotypes MO, NY, n.v., US, n.v., W, n.v., Y, n.v.). *Holtonia, Simira*.—**Elaeagia myriantha** (Standl.) C. M. Taylor & Hammel

Sickingia rhodoclada (Standl.) Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 215. 1940. *Exandra rhodoclada* Standl., J. Wash. Acad. Sci. 13: 292. 1923. Type: MEXICO: Oaxaca, between La Venta and Niltepec, 200 ft., 14 Jul 1895, *E. W. Nelson 2796* (Holotype US 229232 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)).—**Simira rhodoclada** (Standl.) Steyerm.

Sickingia salvadorensis (Standl.) Standl., Field Mus. Nat. Hist., Bot. Ser. 12: 390. 1936. *Calderonia salvadorensis*, J. Wash. Acad. Sci. 13: 290. 1923. Type: EL SALVADOR: San Salvador, Jul 1922, *S. Calderón 761* (Holotype US 1151718 (photos MEXU, PTBG)).—**Simira salvadorensis** (Standl.) Steyerm.

Sickingia vestita Lundell, Wrightia 4: 51. 1968. Nom. nov. for *Sickingia mollis* Lundell, Contrib. Univ. Mich. Herb. 4: 32. 1940. Not *Sickingia vestita* Standl., 1936. Type: MEXICO: Tabasco, Reforma, on the Río San Pedro de Mártir, above Balacan, 22–26 May 1939, *E. Matuda 3161* (Holotype MICH, n.v.; Isotypes A, n.v., TEX-LL (photos MEXU, PTBG), US (photos MEXU, PTBG)). —**Simira salvadorensis** (Standl.) Steyerm.

Siderodendron Cothen., Disp. 6. 1790. (=*Sideroxyloides* Jacq., 1763.) Type: Siderodendron ferreum (Jacq.) J. F. Gmel. [Herein treated as a synonym of *Ixora* L.]

Siderodendron floribundum A. Rich. in Sagra, Hist. Cuba 11: 24. 1850. Type: CUBA: Without precise locality, *A. Richard s.n.* (Holotype presumably P, n.v.).—**Ixora floribunda** (A. Rich.) Griseb.

Simira Aubl., Hist. Pl. Guiane 1: 170, *t. 65*. 1775, not Simira Raf., 1836. Type: Simira tinctoria Aubl.

Simira calderoniana (Standl.) Steyerm., Mem. New York Bot. Gard. 23: 306. 1972. *Sickingia calderoniana* Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 214. 1940. Type: EL SALVADOR: Jayaque, finca del Dr. Zárate, 9 Jan 1939, *M. L. Van Severén 66* (Holotype F 1033327 (photo PTBG)).

Simira darienensis Dwyer, Ann. Missouri Bot. Gard. 67: 493. 1980. Nom. superfl. for *Bathysa panamensis* Dwyer, Ann. Missouri Bot. Gard. 55: 34. 1968 (based on same type). Type: PANAMA: Darién, Río Ucurganti, 7 Jul 1967, *N. Bristan 1187* (Holotype MO 1968219 (photo PTBG); Isotype GH, n.v.). —**Status uncertain.**

Simira klugei (Standl.) Steyerm., Mem. New York Bot. Gard. 23: 302. 1972. *Calderonia klugei* Standl., J. Wash. Acad. Sci. 15: 6. 1924. Type: PANAMA: Panamá, near Chepo, 1924, *H. C. Kluge 19* [=Yale 7132] (Holotype US 1206424 (photos MEXU, PTBG); Isotype F (photo PTBG), (plus another probable isotype at F, a fruiting collection from type tree, *Kluge s.n.*, also Yale 7132)).

Simira maxonii (Standl.) Steyerm., Mem. New York Bot. Gard. 23: 306. 1972. *Genipa maxonii* Standl., J. Wash. Acad. Sci. 8: 642. 1918. Type: PANAMA: Panamá, Canal Zone, forest along the Río Indio de Gatún, near sea level, 17 Feb 1911, *W. R. Maxon 4848* (Holotype US 675223 (photos MEXU, PTBG)).

Simira mexicana (Bullock) Steyerm., Mem. New York Bot. Gard. 23: 307. 1972. *Sickingia mexicana* Bullock in Hook. Icon., ser. 4, 4:

tab. 3321. 1936. Type: MEXICO: México, Distr. Temascaltepec, Luvianos, 26 Sep 1933, *G. B. Hinton 4818* (Holotype K, n.v.; Isotype US (photos MEXU, PTBG)). *Sickingia*.

Simira myriantha (Standl.) Steyerm., Mem. New York Bot. Gard. 23: 306. 1972. *Sickingia myriantha* Standl., Publ. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Type: COLOMBIA: Magdalena, Las Nubes road, region of Santa Marta, 1200 m, 3 Dec 1898, *H. H. Smith 1810* (Holotype F 138660; Isotypes MO, NY, n.v., US, n.v., W, n.v., Y, n.v.). *Holtonia*.—**Elaeagia myriantha** (Standl.) C. M. Taylor & Hammel

Simira rhodoclada (Standl.) Steyerm., Mem. New York Bot. Gard. 23: 307. 1972. *Exandra rhodoclada* Standl., J. Wash. Acad. Sci. 13: 292. 1923. Type: MEXICO: Oaxaca, between La Venta and Niltepec, 200 ft., 14 Jul 1895, *E. W. Nelson 2796* (Holotype US 229232 (photos MEXU, PTBG); Isotype F (photos MEXU, PTBG)). *Simira*.

Simira salvadorensis (Standl.) Steyerm., Mem. New York Bot. Gard. 23: 307. 1972. *Calderonia salvadorensis* Standl., J. Wash. Acad. Sci. 13: 290. 1923. Type: EL SALVADOR: San Salvador, Jul 1922, *S. Calderón 761* (Holotype US 1151718 (photos MEXU, PTBG)). *Sickingia*.

Sipanea Aubl., Hist. Pl. Guiane 1: 147, *t. 56*. 1775. Type: Sipanea pratensis Aubl.

Sipanea biflora (L. f.) Cham. & Schltdl., Linnaea 4: 168. 1829. *Virecta biflora* L. f., Suppl. 17, 134. 1781. Type: SURINAM: Without precise locality, *Dalberg s.n.* (presumably LINN, n.v.).

Sipanea palustris Seem., Bot. Voy. Herald 136. 1854. Type: PANAMA: Panamá, in swamps near Panamá, *Seemann 347* (Holotype BM, in part [excluding specimen of *Microlicia* (Melastomataceae)], n.v. (photo MO)). *Limnosipanea*.

Siphonandra Turcz., Bull. Soc. Imp. Naturalistes Moscou 21: 581. 1848. Not Siphonandra Klotzsch 1851. Type: Siphonandra mexicana Turcz. [Herein treated as a synonym of *Rondeletia* L.]

Siphonandra mexicana Turcz., Bull. Soc. Imp. Naturalistes Moscou 21: 581. 1848. Type: MEXICO: Oaxaca, without precise locality, 3000 ft., *H. Galeotti 2664 bis* (Holotype presumably LE, n.v.; Isotype G-DEL, n.v. (photos A, MO)).—**Rondeletia mexicana** (Turcz.) Standl.

Siphonia Benth., Pl. Hartweg. 84. 1841. Not Siphonia D. Richard ex Schreber, 1791, nor Siphonia E. M. Fries, 1820. Type: Siphonia rivalis Benth. (=*Lindenia* Benth., 1841). See Darwin (1976: 427) for discussions regarding publication of the generic names *Lindenia* vs. *Siphonia*. [Herein treated as a synonym of *Augusta* Pohl.]

Siphonia rivalis Benth., Pl. Hartweg. 84. 1841. Type: GUATEMALA: In rivis, la Vera Paz, *T. Hartweg 581* (Holotype K, n.v. (photo MO)).—**Augusta rivalis** (Benth.) J. H. Kirkbr.

Note: according to Farr et al. (1979: 1620), although the name *Siphonia* was actually printed, it was crossed out in ink and the name *Lindenia* substituted, in manuscript, on all copies before publication. The correction is published on p. 351.

Solena Willd., Sp. Pl. 1: 961. 1798. Not Solena Loureiro, 1790. Type: Solena longiflora (Aubl.) Willd. (= Posoqueria longiflora Aubl.) [Herein treated as a synonym of *Posoqueria* Aubl.]

Solena latifolia Rudge, Pl. Guian. 26. 1805. Type: FRENCH GUIANA: *Martin s.n.* (BM, n.v.).—**Posoqueria latifolia** (Rudge) Roem. & Schult.

Sommera Schltdl., Linnaea 9: 602. 1835. Type: Sommera arborescens Schltdl.

Sommera acuminata Oerst. ex Standl., J. Wash. Acad. Sci. 17: 340. 1927. Type: MEXICO: Oaxaca, Amatlán, *F. Liebmann 11712* (Holotype C, n.v. (photo MEXU); Isotype US). *Arachnothryx*, *Rondeletia*.—**Rondeletia scabra** Hemsl.

Sommera arborescens Schltdl., Linnaea 9: 602. 1835. Type: MEXICO: Veracruz, Hacienda de la Laguna, *Schiede 272* (Holotype presumably HAL, n.v.; Isotypes F (photos MEXU, PTBG), LE, n.v.(fragment F), MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Sommera chiapensis Brandegee, Univ. Calif. Publ. Bot. 6: 196. 1915. Type: MEXICO: Chiapas, Finca Irlanda, Jun 1914, *C. A. Purpus 7263* (Holotype UC 174914, n.v.; Isotypes F (photos MEXU, PTBG), MO, 2 sheets (photos MEXU, PTBG), US (photos MEXU, PTBG)).

Sommera donnell-smithii Standl., Contr. U.S. Natl. Herb. 17: 436. 1914. Type: COSTA RICA: San José, Alajuelita, 3000 ft., Mar 1894, *J. D. Smith 6592* (Holotype US 245836 (photos MEXU, PTBG)).

Sommera dunlapii L. O. Williams, Phytologia 26: 122. 1973. Type: PANAMA: Changuinola Valley, 17 Jan 1924, *V. C. Dunlap 351* (Holotype F 635718 (photo PTBG); Isotype US (photos MEXU, PTBG)).—**Sommera donnell-smithii** Standl.

Sommera fusca Oerst. ex Standl., J. Wash. Acad. Sci. 17: 339. 1927. Type: MEXICO: [Presumably Oaxaca] Jocoaltepec, Jun 1842, *F. Liebmann 11720* [=Liebmann Rubiaceae 36] (Holotype C, n.v.; Isotype US (photos MEXU, PTBG)).

Sommera grandis (Bartl. ex DC.) Standl., N. Amer. Fl. 32: 145. 1921. *Petesia grandis* Bartl. ex DC., Prodr. 4: 395. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 395.1)).

Sommera guatemalensis Standl., Contr. U.S. Natl. Herb. 17: 436. 1914. Type: GUATEMALA: Alta Verapaz, Cubliquitz, 350 m, May 1902, *H. von Tuerckheim 8225* (Holotype US 398487 (photos MEXU, PTBG)).

Sommera mesochora Standl., Contr. U.S. Natl. Herb. 17: 439. 1914. Type: PANAMA: Chiriquí, vicinity of El Boquete, 1000–1300 m, 2–8 Mar 1911, *W. R. Maxon 4941* (Holotype US 675326 (photos MEXU, PTBG)).—**Sommera donnell-smithii** Standl.

Sommera montana L. O. Williams, Phytologia 26: 124. 1973. Type: HONDURAS: Morazán, margen de la Quebrada de La Paz, en medio de la floresta de pino-liquidambar de la Montaña Zanquín, 1600 m, 14 May 1950, *A. Molina R. 2829* (Holotype F 1389080 (photo PTBG); Isotypes EAP, n.v., US (photos MEXU, PTBG)).

Sommera parva Lorence, Novon 4: 134, *fig. 9.* 1994. Type: MEXICO: Chiapas, Mun. de Tila, Pie de Cerro K'abana, 900 m, 1 Jul 1982, *A. Méndez Ton* (*A. Shilom Ton*) *4367* (Holotype MEXU; Isotypes BM, F, MO (photo PTBG), NY, PTBG, US, XAL).

Sommera rivularis L. O. Williams, Phytologia 26: 125. 1973. Type: COSTA RICA: Puntarenas, Río Esquinas, near kilometer 42, 30 m, 8 Dec 1949, *P. H. Allen 5431* (Holotype F 1679274 (photo PTBG); Isotypes EAP, n.v., F, US (photos MEXU, PTBG)).—**Sommera donnell-smithii** Standl.

Sommera subcordata Standl., N. Amer. Fl. 32: 144. 1921. Type: MEXICO: Sinaloa, Colomas, 1897, *J. N. Rose s.n.* (Holotype US 866799 (photos MEXU, PTBG)).—**Sommera grandis** (Bartl. ex DC.) Standl.

Sommera zygocalyx L. O. Williams, Phytologia 26: 126. 1973. Type: MEXICO: Oaxaca, Distr. Choapam [=Choapan], Yaveo, Arroyo de Culebras, 430 m, 21 Mar 1938, *Y. Mexia 9191* (Holotype F 982858 (photos MEXU, PTBG); Isotypes UC (photo PTBG), US (photos MEXU, PTBG)).—**Sommera arborescens** Schltdl.

Spermacoce L., Sp. Pl. 1: 102. 1753. Type: Spermacoce tenuior L.

Spermacoce ambigua Brandegee, Zoë 5: 180. 1904. Type: MEXICO: Veracruz, Córdoba, Jan 1904, *C. A. Purpus 417* (Holotype UC, n.v.; Isotypes MO (photo PTBG), US (photos MEXU, PTBG)).—**Diodia brasiliensis** Spreng.

Spermacoce apiculata Willd. ex Roem. & Schult., Syst. Veg. 3: 531. 1818. Type: BRAZIL: Without precise locality, *Hoffmannsegg s.n.* (B-WI 2626,

n.v.).—**Diodia apiculata** (Willd. ex Roem. & Schult.) K. Schum.

Spermacoce ascendens Sessé & Moç., Fl. Mexic. 25. 1893. Type: MEXICO: Habitat in Ahualulci depressis, ac humidioribus. Floret Octobri, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce aspera (M. Martens & Galeotti) Hemsl., Biol. Centr.-Amer., Bot. 2: 58. 1881. *Borreria aspera* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 130. 1844. Type: MEXICO: Oaxaca, Juquila, près de la côte d'Oaxaca baignée par l'Océan Pacifique, à 4000 pieds, *H. Galeotti 2625* (Holotype presumably BR, n.v.).—**Spermacoce suaveolens** (G. Mey.) Kuntze

Spermacoce asperifolia M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 132. 1844. Type: MEXICO: Oaxaca, près de l'Océan Pacifique, *H. Galeotti 2626* (Holotype presumably BR, n.v.; Isotype P, n.v. (photo MO)). *Borreria*.—**Staelia scabra** (C. Presl) Standl.

Spermacoce assurgens Ruiz & Pav., Syst. Veg. Fl. Peruv. 1: 60, *t. 92*. 1798. Type: PERU: Habitat in ruderalis Limae Chancay et Huanuci, *Ruiz López & Pavón s.n.* (Syntype MA, n.v. (photo MO); Plukenet Alm. 33, *tab. 136/4* (Syntype, n.v.). *Borreria*. For typification, see Verdcourt, 1983.

Spermacoce capitata Sessé & Moç., Pl. Nov. Hispan. 17. 1887 (La Naturaleza 2, 1. suppl. 17. 1887). Not *Spermacoce capitata* Ruiz & Pav., 1798. Type: MEXICO: Habitat Patzquari, *Sessé & Moçiño 633* (Holotype presumably MA, n.v.; probable Isotype F (photo PTBG)).—**Crusea hispida** (Mill.) B. L. Rob. var. **hispida**

Spermacoce coccinea Sessé & Moç., Fl. Mexic. 24. 1893. Not *Spermacoce coccinea* Pav., 1798. Type: Habitat in montibus Malacatepec ad Zitacuarum interiectis. Floret Augusto, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain**, possibly **Crusea coccinea** DC.

Spermacoce confusa Rendle, J. Bot. 74: 12. 1936. Type: MEXICO: Zacuapan, Mirador, *H. Galeotti 2611* (Holotype K, n.v.; Isotype BR, n.v.). Also see comments under *Borreria longiseta* M. Martens & Galeotti. Howard (1989: 464) incorrectly cited the type of *Spermacoce confusa* as "Dillenius, Hort. Eltham. 370, t. 277, f. 359. (1732)." However, this specimen is actually the lectotype of *Spermacoce tenuior* L. (see Rendle, 1934: 330–331).

Spermacoce densiflora (DC.) Alain, Phytologia 54: 113. 1983. *Borreria densiflora* DC., Prodr. 4: 542. 1830. Type: JAMAICA: *Swartz s.n.* (Holotype G-DC, n.v. (microfiche 4: 542.3)). For typification see Steyermark (1972).

Spermacoce depressa Sessé & Moç., Pl. Nov. Hispan. 17. 1887 (La Naturaleza 2, 1. suppl. 17. 1887). Type: MEXICO: Habitat Patzquari, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce distans Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 344. 1820. Type: MEXICO: Jalisco, Volcán de Jorullo, 3000 ft., *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO)). *Borreria*.—**Diodia** cf. **apiculata** (Willd. ex Roem. & Schult.) K. Schum.

Spermacoce diversifolia Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 341. 1820. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO)).—**Crusea diversifolia** (Kunth) W. R. Anderson

Spermacoce echioides Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 344. 1820. Type: MEXICO: Campeche, *Humboldt & Bonpland s.n.* (Holotype presumably P-Bonpland, n.v.).—**Spermacoce assurgens** Ruiz & Pav.

Spermacoce exilis (L. O. Williams) C. D. Adams in W. C. Burger & C. M. Taylor, Fieldiana: Bot., n.s. 33: 316. 1993. Based on *Borreria exilis* L. O. Williams, Phytologia 28: 227. 1974. Not *Spermacoce gracilis* Ruiz & Pav. 1798. Type: COSTA RICA: Cocos Island, Wafer Bay, 28 Jun 1932, *J. T. Howell 10178* (Holotype F 1031197 (photo PTBG)).

Spermacoce glabra Sessé & Moç., Pl. Nov. Hispan. 17. 1887 (La Naturaleza 2, 1. suppl. 17. 1887). Not *Spermacoce glabra* Michx.,

1803. Type: MEXICO: Habitat Patzquari, floret Augusto, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce haenkeana (DC.) Hemsl., Biol. Centr.-Amer., Bot. 2: 59. 1881. *Borreria haenkeana* DC., Prodr. 4: 547. 1830. Type: MEXICO or PERU: Without precise locality or collector (G-DEL, n.v. (photo MO)).—**Spermacoce suaveolens** (G. Mey.) Kuntze

Spermacoce jaliscensis M. E. Jones, Extracts Contr. Western Bot. 18: 67. 1933. Type: MEXICO: Jalisco, Orendain, 30 Nov 1930, ?*Jones 27118* (location unknown).—**Status uncertain.**

Spermacoce laevis Lam., Tabl. Encycl. Méth. Bot. 1: 273, *tab. 1435*. 1791. Type: SANTO DOMINGO: Without precise locality, *Martin s.n.* (Holotype P-LA, n.v.). *Borreria*.—**Spermacoce tenuior** L. For a discussion of synonymy and misapplication of this name see Verdcourt (1983: 545).

Spermacoce latifolia Aubl., Hist. Pl. Guiane 1: 55, *t. 19, fig. 1*. 1775. Type: FRENCH GUIANA: Cayenne, *Aublet s.n.* (Holotype P, n.v.; Isotype MA, n.v. (photo MO)). *Borreria*.

Spermacoce linearis Sessé & Moç., Fl. Mexic. 25. 1893 (La Naturaleza 2, 1: App. 25. 1893). Type: MEXICO: Habitat in montibus Xorullo vicinis. Floret Septembri, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce longiseta (M. Martens & Galeotti) Hemsl., Biol. Centr.-Amer., Bot. 2: 59. 1882. *Borreria longiseta* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 128. 1844. Type: MEXICO: Veracruz, Zacuapan et Mirador [label on Isotype at P states "cordillères près de Vera Cruz, 1000 pieds"], *H. Galeotti 2611* (Holotype BR, n.v.; Isotypes K, n.v., P, n.v. (photo MO)). Also see comments under *Borreria longiseta*. The description does not apply to the same plant as represented by the type (C. D. Adams, pers. comm. 1996).—**Status uncertain.**

Spermacoce mauritiana Gideon in Verdcourt, Kew Bull. 37: 547. 1983. Nom. nov. for *Borreria repens* DC., Prodr. 4: 544. 1830. Not *Spermacoce repens* Willd. ex Cham. & Schltdl., 1828, nor Sessé & Moç., 1893, nor Larrañaga, 1923. Type: MAURITIUS: Sieber Fl. Maurit. II, 144 (Holotype G, n.v.; Isotypes P). See Verdcourt (1983) for discussion of typification.—**Spermacoce exilis** (L. O. Williams) C. D. Adams

Spermacoce megalocarpa A. Gray, Proc. Amer. Acad. Arts 21: 381. 1886. Type: MEXICO: Chihuahua, south-western Chihuahua, wet places in the higher mountains above Batopilas, Aug–Nov 1885, *E. Palmer 185* (Holotype GH, n.v.; Isotypes NY, n.v., US (photos MEXU, PTBG)).—**Crusea megalocarpa** (A. Gray) S. Watson

Spermacoce nesiotica (B. L. Rob.) G. A. Levin in G. A. Levin & R. Moran, Vasc. Fl. Isla Socorro, Mexico (Mem. San Diego Soc. Nat. Hist. 16): 51. 1989. *Borreria nesiotica* B. L. Rob., Proc. Amer. Acad. Arts 45: 409. 1910. Type: MEXICO: Soccoro Island (Revillagigedo Group), 1897, *A. W. Anthony s.n.* (Holotype GH, n.v.; Isotype US (photos MEXU, PTBG)).

Spermacoce ocymifolia Willd. ex Roem. & Schult., Syst. Veg. 3: 530. 1819 [as *ocimifolia*]. Type: WEST INDIES: Without precise locality, *Rudolphi s.n.* in 1768 (presumably B-WI, n.v.).

Spermacoce ocymoides Burm. f., Fl. Ind. 34. 1768. Type: Tropical Asia, collector and precise locality unknown (presumably G, n.v.). Note: *Spermacoce ocymoides* is not known from the Neotropics; however, this name has been applied incorrectly by many authors to tropical American plants representing *S. exilis, S. ovalifolia, and S. prostrata*.

Spermacoce ovalifolia (M. Martens & Galeotti) Hemsl., Biol. Centr.-Amer., Bot. 2: 59. 1881. *Borreria ovalifolia* M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 129. 1844. Type: MEXICO. Veracruz, Mirador, 5000 ft., *H. Galeotti 2609* (Holotype BR, n.v.).

Spermacoce patula (M. Martens & Galeotti) Hemsl., Biol. Centr.-Amer., Bot. 2: 59. 1881. *Borreria patula* M. Martens & Galeotti, Bull. Acad. Roy. Bruxelles 11: 128. 1844. Type: MEXICO: Veracruz, Mirador, 3000 ft., *H.*

Galeotti 2608 (Holotype BR, n.v.; Isotype K, n.v.).—**Spermacoce prostrata** Aubl.

Spermacoce polycephala Bartl. ex DC., Prodr. 4: 558. 1830. Type: MEXICO: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 558.54)).—**Status uncertain.**

Spermacoce pringlei S. Watson, Proc. Amer. Acad. Arts 25: 152. 1890. Type: MEXICO: Jalisco, shaded hillsides near Guadalajara, 27 Sep 1889, *C. G. Pringle 2464* (Holotype GH, n.v.; Isotypes MO (photos MEXU, PTBG), US (photos MEXU, PTBG)).—**Spermacoce ovalifolia** (M. Martens & Galeotti) Hemsl.

Spermacoce prostrata Aubl., Hist. Pl. Guiane Franc. 1: 58, *tab. 20, fig. 3*. 1775. Type: FRENCH GUIANA: *Aublet s.n.* (Holotype P, n.v.).

Spermacoce psyllioides Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. 3: 346. 1819. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (Holotype P-Bonpland, n.v. (photo MO)).—**Crusea psyllioides** (Kunth) W. R. Anderson

Spermacoce reclinata Nees, Horae Phys. Berol. 50. 1820. Type: MEXICO: In regno Mexicano, without precise locality or collector (location unknown).—**Spermacoce tenuior** L.

Spermacoce rigida Willd. ex Roem. & Schult., Syst. Veg. 3: 531. 1818. Type: VENEZUELA: Silla de Caracas, *Humboldt & Bonpland s.n.* (Holotype B-WI 2628, n.v.; Isotype G-DC, n.v. (microfiche IDC.7440.174:III,4)). *Diodia*.—**Diodia apiculata** (Willd. ex Roem. & Schult.) K. Schum.

Spermacoce riparia Cham. & Schltdl., Linnaea 3: 355. 1828. Type: BRAZIL: Rio Negro, (Rincón de Gallinas), *Sellow s.n.* (Holotype presumably B or HAL, n.v.).—**Spermacoce tenuior** L.

Spermacoce rubra Jacq., Pl. Rar. Hort. Schoenbr. 3: 3, *pl. 256*. 1798. Type: Cuba [but probably from MEXICO], *Jacquin s.n.* (probable type W, n.v., fragment F). For discussion, see Anderson (1972: 110–111). *Crusea*.—**Crusea hispida** (Mill.) B. L. Rob. var. **hispida**

Spermacoce scabiosoides (Cham. & Schltdl.) Kuntze, Revis. Gen. Pl. 3: 123. 1898. *Borreria scabiosoides* Cham. & Schltdl., Linnaea 3: 318. 1828. Type: BRAZIL: *Sellow s.n.* (presumably B, n.v.).

Spermacoce serrulata P. Beauv., Fl. Oware Benin 1: 39, *tab. 23*. 1805. Type: NIGERIA: *Palisot de Beauvois s.n.* (presumably P, n.v.).—**Diodia serrulata** (P. Beauv.) G. Taylor

Spermacoce stricta Sessé & Moç., Fl. Mexic. 24. 1893. Type: MEXICO: Habitat in calidis, N. H., *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce suaveolens (G. Mey.) Kuntze, Revis. Gen. Pl. 3: 123. 1898. *Borreria suaveolens* G. Mey., Prim. Fl. Esseq. 81, *pl. 1*. 1818. Type: SURINAM: In arenosis continentis circa Arouabischkrek, *G. Meyer s.n.* (Holotype GOET, n.v.).

Spermacoce tenui Sessé & Moç., Fl. Mexic. 25. 1893 (La Naturaleza 2,1. suppl. 25. 1897). Type: MEXICO: Habitat Patzcuari. Floret Augusto, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce tenuiflora Sessé & Moç., Fl. Mexic. 24. 1893 (La Naturaleza 2,1. suppl. 24. 1897). Type: Habitat in Zitacuari. Floret Augusto, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Crusea longiflora** (Roem. & Schult.) W. R. Anderson

Spermacoce tenuifolia Sessé & Moç., Pl. Nov. Hispan. 17. 1897 (La Naturaleza 2, 1. suppl. 17. 1897). Type: MEXICO: Habitat Patzquari, *Sessé & Moçiño s.n.* (presumably MA, n.v.).—**Status uncertain.**

Spermacoce tenuior L., Sp. Pl. 1: 102. 1753. Lectotype: Habitat in Carolina, *Spermacoce verticillis tenuioribus* Dillenius, Hortus Elthamensis 370, *tab. 277, fig. 359*. 1732. Typotype in Herb. Sherard (OXF, n.v.), drawn from specimens grown at Eltham; designated by Rendle (1934: 333). Typification confirmed by Verdcourt (1983).

Spermacoce tenuior Sessé & Mociño, Fl. Mexic. 24. 1893. Not *Spermacoce tenuior* L., 1753.

Type: Habitat in plerisque Nov. Hisp. temperatis agris. Floret Julio (presumably MA, n.v.).—**Status uncertain.**

Spermacoce tetracocca M. Martens & Galeotti, Bull. Acad. Roy. Soc. Bruxelles 112: 132. 1844. Type: MEXICO: Michoacán, Santa María, near Morelia, *H. Galeotti 2587* (Holotype presumably BR, n.v.; Isotype K, n.v., P (photos MEXU, PTBG)).—**Richardia tricocca** (Torr. & A. Gray) Standl. subsp. **tetracocca** (M. Martens & Galeotti) W. H. Lewis & R. L. Oliv.

Spermacoce tetraquetra A. Rich. in Sagra, Hist. Fis. Cub. Bot. 11: 29. 1850. Type: CUBA: Without precise locality, *R. de la Sagra s.n.* (Holotype presumably P, n.v.; probable Isotype F (photo PTBG)).

Spermacoce vegeta (Standl. & Steyerm.) C. D. Adams in W. C. Burger & C. M. Taylor, Fieldiana, Bot., n.s. 30: 320. 1993. *Borreria vegeta* Standl. & Steyerm., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 21. 1943. Type: GUATEMALA: Dept. Jutiapa, between Jutiapa and La Burrera, NE of Jutiapa, 800–850 m, 1 Nov 1940, *P. C. Standley 76007* (Holotype F 1091300 (photos MEXU, PTBG)).

Spermacoce verticillata L., Sp. Pl. 1: 102. 1753. Type: JAMAICA: *Hort. Cliff. 33* (BM, n.v.). *Borreria*. For typification see Rendle (1934: 331).

Spermacoce villosa Sw., Prodr. Veg. Ind. Occ. 29. 1788. Type: JAMAICA: *Swartz s.n.* (Holotype presumably BM, n.v.). —**Mitracarpus hirtus** (L.) DC.

Stachyarrhena Hook. f., Hook. Icon. Pl. 1068. 1870. Type: Stachyarrhena spicata Hook. f.

Stachyarrhena heterochroa Standl., Contr. U.S. Natl. Herb. 18: 142. 1916. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre de Dios), 10–104 m, Jul–Aug 1911, *H. Pittier 4078* (Holotype US 679174 (photos MEXU, PTBG); Isotype F).

Staelia Cham. & Schltdl., Linnaea 3: 364, *pl. 3, fig. 3*. 1828. Type: Staelia thymoides Cham. & Schltdl.

Staelia scabra (C. Presl) Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 385. 1931. *Diphragmus scaber* C. Presl, Bot. Bermerk. 81. 1844. Type: MEXICO: Habitat in Mexico, precise locality or collector not cited.

Stannia H. Karst., Auswahl Gewächse Venezuela 27. 1848. Type: Stannia formosa H. Karst.

Stannia panamensis Walp. & Duchass., Linnaea 23: 755. 1850. Type: PANAMA: Isthmo Panamensis, *Duchassaing* ? (location unknown).—**Posoqueria panamensis** (Walp. & Duchass.) Walp.

Stenostomum C. F. Gaertn., Fruct. Sem. Pl. 3: 69. 1806. Type: Stenostomum lucidum (Sw.) C. F. Gaertn.

Stenostomum lucidum (Sw.) C. F. Gaertn., Fruct. Sem. Pl. 3: 69. 1806. *Laugeria lucida* Sw., Prodr. Veg. Ind. Occ. 48. 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (presumably S, n.v.).

Steyermarkia Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 216. 1940. Type: Steyermarkia guatemalensis Standl.

Steyermarkia guatemalensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 22: 216. 1940. Type: GUATEMALA: Izabal, Río Dulce, 2–4 miles west of Livingston, on south side (left.-hand side going up river), alt. 1–3 m, 16 Apr 1940, *J. A. Steyermark 39520* (Holotype F 1035008 (photo PTBG); Isotypes F 1035009, MO (photos MEXU, PTBG)).

Stomandra Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 247. 1947. Type: Stomandra costaricensis Standl. [Herein treated as a synonym of *Rustia* Klotzsch.]

Stomandra costaricensis Standl., Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 247. 1947. Type: COSTA RICA: San José, basin of El General, 675–900 m, Mar 1940, *A. F. Skutch 4777* (Holotype F 1044344 (photo PTBG); Isotypes MO (photo PTBG), US).—**Rustia costaricensis** (Standl.) Lorence

Strumpfia Jacq., Enum. Syst. Pl. 28. 1760. Type: Strumpfia maritima Jacq.

Strumpfia maritima Jacq., Enum. Syst. Pl. 28. 1760. Type: Curaçao, in rupestribus maritimus, *Jacquin s.n.* (location unknown). Designation of a neotype may be necessary according to Howard (1989: 469).

Stylosiphonia Brandegee, Univ. Calif. Publ. Bot. 6: 70. 1914. Type: Stylosiphonia glabra Brandegee

Stylosiphonia glabra Brandegee, Univ. Calif. Publ. Bot. 6: 70. 1914. Type: MEXICO: Chiapas, without precise locality, 1913, *C. A. Purpus 7057* (Holotype UC 173437; Isotypes F (photo PTBG), GH, n.v., MO (photos MEXU, PTBG), US).

Stylosiphonia salvadorensis Standl., J. Wash. Acad. Sci. 14: 246. 1924. Type: EL SALVADOR: San Vicente, Volcán de San Vicente, 1200–1500 m, 7–8 Mar 1922, *P. C. Standley 21559* (Holotype US 1137349 (photos MEXU, PTBG); Isotype GH, n.v.). —**Rondeletia jurgensenii** Hemsl.

Syringantha Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 153. 1930. Type: Syringantha loranthoides Standl.

Syringantha coulteri (Hook. f. ex Hemsl.) T. McDowell, Novon 6: 277. 1996. *Exostema coulteri* Hook. f. in Hemsl., Diag. Pl. Nov. 32. 1879 [as *Exostemma*]. Type: MEXICO: Hidalgo, Zimapán, *Coulter 209* (Holotype K, n.v.; Isotype MO).

Syringantha loranthoides Standl., Publ. Field Columbian Mus., Bot. Ser. 8: 153. 1930. Lectotype: MEXICO: [Presumably Hidalgo], entre San Diego y la Hacienda de Santiaguillo, Jul 1842, *Karwinsky 308* [upper specimen] (LE, n.v., fragment F (photos MEXU, PTBG); Isolectotype MW, n.v.; designated by McDowell 1996a: 277). Syntypes: MEXICO: Santiaguillo, Jul 1842, *Karwinsky 308* [lower specimen] (LE, n.v., fragment F); El Pantario et in Santiaguillo, Apr 1843, *Karwinsky 308b* (LE, n.v. (fragment F), MW, n.v.); Santiaguillo, Oct 1842, *Karwinsky 308c* [original *31*] (LE, n.v., fragment F).—**Syringantha coulteri** (Hook. f. ex Hemsl.) T. McDowell

Tapogomea Aubl., Hist. Pl. Guiane 157. 1775. Type: Tapogomea violacea Aubl. Nom. rej. vs. Cephaëlis Sw. 1788 (nom. cons.). [Herein treated as a synonym of *Psychotria* L.]

Tapogomea axillaris (Sw.) Poir. in Lam., Encycl. Méth. Bot. 7: 587. 1806. *Cephaëlis axillaris* Sw., Prodr. 45. 1788. Type: ST. CHRISTOPHER [=ST. KITTS]: Without precise locality, *Swartz s.n.* (presumably S, n.v.).—**Psychotria aubletiana** Steyerm.

Tapogomea elata (Sw.) Poir.in Lam., Encycl. Méth. Bot. 7: 585. 1806. *Cephaëlis elata* Sw., Prodr. 45. 1788. Type: JAMAICA: Without precise locality, *Swartz s.n.* (presumably S, n.v.).—**Psychotria elata** (Sw.) Hammel

Tapogomea tomentosa Aubl., Hist. Pl. Guiane 160, *pl. 61*. 1775. Type: FRENCH GUIANA: In sylvarum locis apertis, *Aublet s.n.* (Holotype presumably P, n.v.; Isotype B, presumably destroyed (photo MO)). *Cephaëlis*, *Evea*, *Uragoga*.—**Psychotria poeppigiana** Müll. Arg.

Tertrea DC., Prodr. 4: 481. 1830. Type: Tertrea martinicensis DC. [Herein treated as a synonym of *Machaonia* Humb. & Bonpl.]

Tertrea martinicensis DC., Prodr. 4: 481. 1830. Type: MARTINIQUE: *Richard s.n.* (Holotype P, n.v.).—**Machaonia martinicensis** (DC.) Standl.

Tobagoa Urb., Repert. Spec. Nov. Regni Veg. 14: 341. 1916. Type: Tobagoa maleolens Urb.

Tobagoa maleolens Urb., Repert. Spec. Nov. Regni Veg. 14: 343. 1916. Type: TOBAGO: In sylvis ad Gr. Dog River, Nov 1889, *Eggers 5783* (Holotype B, presumably destroyed; Isotypes K, n.v., US (photo PTBG)).

Tocoyena Aubl., Hist. Pl. Guiane 1: 131, *tab. 50*. 1775. Type: Tocoyena longiflora Aubl.

Tocoyena obliquinervia (Standl.) Standl., Contr. Arnold Arbor. 5: 152. 1933. *Posoqueria obliquinervia* Standl., J. Wash. Acad. Sci. 18: 167. 1928. Type: COSTA RICA: Forêts et

bords du Río Naranjo, 200–250 m, Mar 1893, *A. Tonduz 7528* [erroneously published as *9528*] (Holotype US 764158 (photos MEXU, PTBG)).—**Tocoyena pittieri** (Standl.) Standl.

Tocoyena pittieri (Standl.) Standl., Contr. Arnold Arbor. 5: 151. 1933. *Posoqueria pittieri* Standl., J. Wash. Acad. Sci. 18: 167. 1928. Type: PANAMA: Near Hydrographic Station on Trinidad River, 17 May 1914, *H. Pittier 6635* (Holotype US 716697 (photos MEXU, PTBG)).

Tocoyena tabascensis Standl., Field Mus. Nat. Hist., Bot. Ser. 11: 273. 1936. Type: MEXICO: Tabasco, Paso de Espejo, 25 Nov 1888, *J. N. Rovirosa 301* (Holotype K (photos F, MEXU, PTBG)).—**Blepharidium guatemalense** Standl.

Tontanea Aubl., Hist. Pl. Guiane 1: 108. 1775. Type: Tontanea guianensis Aubl. [Herein treated as a synonym of *Coccocypselum* P. Browne.]

Tontanea canescens (Willd. ex Cham. & Schltdl.) Standl., N. Amer. Fl. 32: 146. 1921. *Coccocypselum canescens* Willd. ex Cham. & Schltdl., Linnaea 4: 139. 1829. Not *C. canescens* Willd. ex Schult. & Schult., 1827. Type: VENEZUELA: Buenavista prope Caracas, *Humboldt & Bonpland s.n.* (Holotype B-WI 2874, n.v.). —**Coccocypselum lanceolatum** (Ruiz & Pav.) Pers.

Tontanea glabra (Bartl. ex DC.) Standl., J. Wash. Acad. Sci. 15: 104. 1925. *Coccocypselum glabrum* Bartl. ex DC., Prodr. 4: 397. 1830. Type: PANAMA: Without precise locality, *Haenke s.n.* (Holotype presumably PR, n.v., fragment G-DC, n.v. (microfiche 4: 397.14)).—**Coccocypselum hirsutum** Bartl. ex DC. var. **glabrum** (Bartl. ex DC.) L. O. Williams

Totanea guianensis Aubl., Hist. Pl. Guiane 1: 108, *tab. 42*. 1775. Type: FRENCH GUIANA: In sylvis Cayenne, *Aublet s.n.* (Holotype presumably BM or P, n.v.).—**Coccocypselum guianense** (Aubl.) K. Schum. in Mart.

Tontanea herbacea (P. Browne) Standl., N. Amer. Fl. 32: 147. 1921. *Coccocypselum herbaceum* P. Browne, Civ. Nat. Hist. Jam. 144, *pl. 6, f. 2*. 1756. Type: JAMAICA: Cooler mountains of Liguancee and Mont-Diable, *P. Browne s.n.* (LINN, n.v.). —**Coccocypselum herbaceum** P. Browne

Tontanea hirsuta (Bartl. ex DC.) Standl., N. Amer. Fl. 32: 147. 1921. *Coccocypselum hirsutum* Bartl. ex DC., Prodr. 4: 396. 1830. Type: Precise locality unknown [probably Trinidad], *Haenke s.n.* (Holotype presumably PR, n.v.. fragment G-DC, n.v. (microfiche 4: 396.5)).—**Coccocypselum hirsutum** Bartl. ex DC. var. **hirsutum**

Tontanea hispidula Standl., N. Amer. Fl. 32: 147. 1921. Type: PANAMA: Chagres, Isthmus of Panama, Jan–Feb 1850, *A. Fendler 179* (Holotype US 42058 (photo MO); Isotype US). *Coccocypselum*.—**Coccocypselum herbaceum** P. Browne

Tournefortiopsis Rusby, Bull. New York Bot. Gard. 4: 369. 1907. Type: Tournefortiopsis reticulata Rusby. [Herein treated as a synonym of *Guettarda* L.]

Tournefortiopsis reticulata Rusby, Bull. New York Bot. Gard. 4: 369. 1907. Not *Guettarda reticulata* Griseb., 1863. Type: BOLIVIA: Without precise locality, *Bang 2230* (Holotype US, n.v.).—**Guettarda tournefortiopsis** Standl.

Triodon A. DC., Prodr. 4: 566. 1830. Not Triodon Baumgartner, 1816. Type: Not designated. [Herein treated as a synonym of *Galianthe* Griseb.]

Triodon angulatum Benth., Pl. Hartweg. 70. 1840. Type: MEXICO: Oaxaca, Teotolcingo in montibus Chinantla, *T. Hartweg 507* (Holotype K, n.v.). *Diodia*.—**Galianthe brasiliensis** (Spreng.) E. L. Cabral & Bacigalupo subsp. **angulata** (Benth.) E. L. Cabral & Bacigalupo

Uncaria Schreb., Gen. 125. 1789. Nom. cons. Type: Uncaria guianensis (Aubl.) J. F. Gmel. (Basionym: *Ourouparia guianensis* Aubl.)

Uncaria tomentosa (Willd. ex Roem. & Schult.) DC., Prodr. 4: 349. 1830. *Nauclea tomentosa* Willd. ex Roem. & Schult., Syst. Veg. 5: 221. 1819. Type: COLOMBIA: In ripa flumen Magdalenae prope Naers, *Humboldt s.n.* (Holotype B-WI 3910, n.v.).

Uragoga Baill., Adansonia 12: 323. 1879. Type: Not designated.

Uragoga carpinterensis Kuntze, Rev. Gen. Pl. 2: 955. 1891. Based on *Palicourea lanceolata* Oerst. ex Pol., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 39. 1853, pro syn. Type: COSTA RICA: San José, in Monte Candelaria, 2100 m, *Oersted 11556* (Holotype C, n.v. (photo and fragment F)). —**Palicourea angustifolia** Kunth

Uragoga carthagenensis (Jacq.) Kuntze, Rev. Gen. Pl. 2: 959. 1891. *Psychotria carthagenensis* Jacq., Enum. Syst. Pl. Carib. 16. 1760. Type: COLOMBIA: Bolívar, vicinity of Cartagena, *Jacquin s.n.* (location unknown).—**Psychotria carthagenensis** Jacq.

Uragoga cordillerae Kuntze, Rev. Gen. Pl. 2: 955. 1891. Based on *Palicourea mexicana* Benth. in Oerst., Vidensk. Dansk Meddel. Naturhist. Foren. Kjöbenhavn 1852: 37. 1853. Not *Uragoga mexicana* (Willd ex Roem. & Schult.) Kuntze, 1891. Type: COSTA RICA: In monte Barba, *Oersted 11559* (Lectotype C, n.v.; designated by Standley 1938). —**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Uragoga costaricensis (Benth.) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Palicourea costaricensis* Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjobenhavn 1852: 38. 1853. Type: COSTA RICA: Heredia, Volcán de Barba and Cerros de Candelaria, *Oersted 11540* (Holotype C, n.v. (photo F); Isotypes MICH, n.v., US, n.v.). —**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Uragoga costivenia (Griseb.) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Psychotria costivenia* Griseb., Pl. Wright. Cuba Orient. 2: 508. 1862. Type: CUBA: Cuba Orientali, prope Monte Verde, Jan–Jul 1859, *Wright 242* (Lectotype GH, n.v.; Isolectotype BR, n.v.; designated by Hamilton, 1989).—**Psychotria costivenia** Griseb.

Uragoga crocea (Sw.) Kuntze, Rev. Gen. Pl. 1: 299. 1891. *Psychotria crocea* Sw., Prodr. Veg. Ind. Occ. 44. 1788. Type: JAMAICA: *Swartz s.n.* (Holotype BM, n.v.).—**Palicourea crocea** (Sw.) Roem. & Schult.

Uragoga emetica (L. f.) Baill., Hist. Pl. 7: 371. 1880. *Psychotria emetica* L. f., Suppl. Pl. 144. 1781. Type: COLOMBIA: America septentrionalis provinciae Gironensis, *Mutis 1602* (Holotype LINN, n.v.; probable Isotype US (photo PTBG)).—**Psychotria emetica** L. f.

Uragoga erythrocarpa (Schltdl.) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Psychotria erythrocarpa* Schltdl., Linnaea 9: 595. 1834. Type: MEXICO: Veracruz, Hacienda de la Laguna, *Schiede & Deppe 385* (Holotype B, presumably destroyed (photo & fragment F); Isotype K, n.v.).—**Psychotria erythrocarpa** Schltdl.

Uragoga galeottiana (M. Martens) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Palicourea galeottiana* M. Martens, Bull. Acad. Roy. Sci. Bruxelles 14: 136. 1844. Type: MEXICO: Oaxaca, Cordillera, 6500 ft., 1840, *H. Galeotti 2602* (Lectotype BR (photos MEXU, PTBG); Isolectotypes K, n.v., P (photos MEXU, PTBG); designated by Taylor & Lorence, 1985).—**Psychotria galeottiana** (M. Martens) C. M. Taylor & Lorence

Uragoga graciliflora (Benth.) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Psychotria graciliflora* Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 35. 1853. Type: COSTA RICA: Alajuela, ad Naranjo, Apr 1847, *Oersted 11611* (Holotype C (photos F, MEXU, PTBG); Isotype US (photos MEXU, PTBG)). *Mapouria.* —**Psychotria graciliflora** Benth. in Oerst.

Uragoga granadensis (Benth.) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Psychotria granadensis* Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 34. 1853. Type: NICARAGUA: Granada, *Oersted*

11612 (Holotype C (photos MEXU, PTBG)).—**Psychotria nervosa** Sw.

Uragoga grandis (Sw.) Kuntze, Rev. Gen. Pl. 2: 960. 1891. *Psychotria grandis* Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: JAMAICA: Interioris occidentalis, *Swartz s.n.* (Holotype S, n.v. (photo A)).—**Psychotria grandis** Sw.

Uragoga horizontalis (Sw.) Kuntze, Rev. Gen. Pl. 1: 300. 1891. *Psychotria horizontalis* Sw., Prodr. Veg. Ind. Occ. 44. 1788. Type: SANTO DOMINGO: Without precise locality, *Swartz s.n.* (Holotype S, n.v. (photo A)).—**Psychotria horizontalis** Sw.

Uragoga ipecacuanha (Brot.) Baill., Hist. Pl. 7: 370. 1880. *Calicocca ipecacuanha* Brot., Trans. Linn. Soc. 6: 137. 1802. Type: BRAZIL: Without precise locality, *Gomes s.n.* (presumably LISU, n.v.). *Cephaëlia*, *Evea*. —**Psychotria ipecacuanha** (Brot.) Stokes

Uragoga justicioides (Schltdl.) Kuntze, Rev. Gen. Pl. 1: 300. 1891. *Psychotria justicioides* Schltdl., Linnaea 9: 596. 1834. Type: MEXICO: Barranca de Tioselo, *Schiede & Deppe 259* (Holotype presumably HAL, n.v.; Isotypes B, presumably destroyed (photo MO), P (photos MEXU, PTBG)). —**Psychotria hebeclada** DC.

Uragoga longicollis (Benth.) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Psychotria longicollis* Benth. in Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 33. 1853. Type: COSTA RICA: Insula San Lucas, *Oersted 11621* (Lectotype C, here designated (photos MEXU, PTBG); Isolectotype C, lower right-hand collection, mounted on same sheet as syntype *Oersted 11622*). Syntypes: COSTA RICA: In monte Aguacate, Nov 1846, *Oersted 11622* (C (photos MEXU, PTBG)); Aguacate, *Oersted 11629* (C (photos MEXU, PTBG)). *Oersted 11621,* with two leafy fruiting branches, is in excellent condition and represents the best choice for lectotype. —**Psychotria horizontalis** Sw.

Uragoga marginata (Sw.) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Psychotria marginata* Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: JAMAICA: In sylvestribus, *Swartz s.n.* (Holotype S, n.v. (photo A); probable Isotype C (photos MEXU, PTBG)).—**Psychotria marginata** Sw.

Uragoga mexicana (Willd. ex Roem. & Schult.) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Psychotria mexicana* Willd. ex Roem. & Schult., Syst. Veg. 5: 189. 1819. Type: MEXICO: Without precise locality, *Humboldt & Bonpland s.n.* (Holotype B-WI, n.v.). —**Palicourea padifolia** (Willd. ex Roem. & Schult.) C. M. Taylor & Lorence

Uragoga micrantha (Kunth) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Psychotria micrantha* Kunth in Humb., Bonpl. & Kunth, Nov. Gen. Sp. Pl. 3: 363, *pl. 284*. 1819. Type: PERU?: Without precise locality, *A. Bonpland s.n.* (Holotype P, n.v. (fragment F)). *Mapouria*.—**Psychotria micrantha** Kunth in Humb., Bonpl. & Kunth

Uragoga microdesmia (Oerst.) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Psychotria microdesmia* Oerst., Vidensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 36. 1853. Type: COSTA RICA: Ad Jaris, *Oersted 11610* (Holotype C (photos MEXU, MO, PTBG); Isotypes C (photos MEXU, PTBG), US (photo PTBG)).—**Psychotria viridis** Ruiz & Pavón

Uragoga miradorensis (Oerst.) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Mapouria miradorensis* Oerst., Amér. Centr. 17, *tab. 14, fig. 9*. 1863. Type: MEXICO: Veracruz, Mirador, in quercetum, 3000 ft., *F. Liebmann 11662* (Lectotype C (photos MEXU, PTBG); Isolectotype US, n.v.; designated by Hamilton, 1989).—**Psychotria costivenia** Griseb. var. **costivenia**

Uragoga morae (Pol.) Kuntze, Rev. Gen. Pl. 2: 961. 1891. *Psychotria morae* Pol., Linnaea 41: 570. 1877. Type: COSTA RICA: San José, Jun 1875, *H. Polakowski 171* (Holotype B, presumably destroyed (photos GH, US)). —**Psychotria quinqueradiata** Pol.

Uragoga nicaraguensis (Benth.) Kuntze, Rev. Gen. Pl. 2: 957. 1891. *Psychotria nicaraguensis* Benth. in Oerst., Viddensk. Meddel. Dansk Naturhist. Foren. Kjöbenhavn 1852: 34. 1853. Type: NICARAGUA: Río San Juan, *Oersted 11634* (Lectotype C, here designated (photos MEXU, PTBG)). Syntype:

COSTA RICA: Ad Jaris, *Oersted 11635* (C (photos MEXU, PTBG)). *Oersted 11634* is selected as lectotype as it is the most complete collection, with leaves, stipules, and a mature infructescence.—**Psychotria marginata** Sw.

Uragoga oerstediana Kuntze, Rev. Gen. Pl. 2: 957. 1891, nomen superfl. Based on *Mapouria obovata* Oerst., Amér. Centr. 17, *tab. 14, figs. 3,4*. 1863. Not *Psychotria obovata* Ruiz & Pav., 1799. Type: MEXICO: Veracruz, *F. Liebmann s.n.* (Holotype C, n.v.). *Psychotria*.—**Psychotria quinqueradiata** Pol.

Uragoga papantlensis (Oerst.) Kuntze, Rev. Gen. Pl. 2: 962. 1891. *Mapouria papantlensis* Oerst., Amér. Centr. 17, *tab. 14, fig. 5*. 1863. Type: MEXICO: Veracruz, Papantla, *F. Liebmann s.n.* (Holotype presumably C, n.v.). —**Psychotria papantlensis** (Oerst.) Hemsl.

Uragoga parasitica (Sw.) M. Gómez, Anal. Soc. Esp. Hist. Nat. 3: 293. 1894. *Psychotria parasitica* Sw., nom. illegit. For discussion, see Steyermark, 1972: 569.—**Psychotria guadalupensis** (DC.) Howard

Uragoga phoeniciana K. Schum. in Engl. & Prantl, Naturl. Pflanzenfam. 4(4): 120. 1891. Type: COSTA RICA: Suerre, Llanuras de Santa Clara, 300 m, Feb 1896, *J. Donnell Smith 6584* (Syntype US, n.v.); same locality, *J. Donnell Smith 6586* (Syntype US, n.v.) *Cephaëlis*.—**Status uncertain**, probably **Psychotria** sp.

Uragoga quinqueradiata (Pol.) Kuntze, Rev. Gen. Pl. 2: 962. 1891. *Psychotria quinqueradiata* Pol., Linnaea 41: 570. 1877. Type: COSTA RICA: San José, 24 Jun 1875, *H. Polakowski 135* (Lectotype B, presumably destroyed (photos BH, MO, US); designated by Hamilton, 1989).—**Psychotria quinqueradiata** Pol.

Uragoga sessilifolia (M. Martens & Galeotti) Kuntze, Rev. Gen. Pl. 2: 962. 1891. *Psychotria sessilifolia* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 228. 1844. Type: MEXICO: Veracruz, Mirador et Zacuapan, 3000 pieds, *H. Galeotti 7078* (Holotype presumably BR, n.v.; Isotypes G-DEL, n.v. (photo MO), P (label states "Xalapa," photos MEXU, PTBG)). —**Psychotria tenuifolia** Sw.

Uragoga tenuifolia (Sw.) Kuntze, Rev. Gen. Pl. 2: 963. 1891. *Psychotria tenuifolia* Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: SANTO DOMINGO: According to Howard (1989), a neotype needs to be designated. —**Psychotria tenuifolia** Sw.

Uragoga tomentosa (Aubl.) K. Schum., Nat. Pflanzenfam. 4(4): 120. 1891. *Tapogomea tomentosa* Aubl., Hist. Pl. Guian. 160, *pl. 61*. 1775. Type: FRENCH GUIANA: In sylvarum locis apertis, *Aublet s.n.* (presumably P, n.v.).—**Psychotria poeppigiana** Müll. Arg.

Uragoga trichotoma (M. Martens & Galeotti) Kuntze, Rev. Gen. Pl. 2: 963. 1891. *Psychotria trichotoma* M. Martens & Galeotti, Bull. Acad. Roy. Sci. Bruxelles 11: 227. 1844. Type: MEXICO: Veracruz, Xalapa et Mirador, 4000 pieds, *H. Galeotti 7092* (Holotype presumably BR, n.v.; Isotype P (photos MEXU, PTBG)).—**Psychotria trichotoma** M. Martens & Galeotti

Uragoga uliginosa (Sw.) Kuntze, Rev. Gen. Pl. 2: 963. 1891. *Psychotria uliginosa* Sw., Prodr. Veg. Ind. Occ. 43. 1788. Type: JAMAICA. According to Howard (1989), a neotype needs to be designated.—**Psychotria uliginosa** Sw.

Uragoga viridis (Ruiz & Pav.) Kuntze, Rev. Gen. Pl. 2: 963. 1891. *Psychotria viridis* Ruiz & Pav., Fl. Peruv. 2: 61. *tab. 210, fig. b*. 1799. Type: PERU: Andes de Peru, Chinchao et Macora, Jul 1894, *Ruiz López & Pavón s.n.* (Holotype MA, n.v. (photo MO)). —**Psychotria viridis** Ruiz & Pav.

Valantia L., Sp. Pl. 2: 1051. 1753. Lectotype: Valantia muralis L.

Valantia hypocarpia L., Syst. Nat., ed. 10, 1307. 1759. Type: JAMAICA: Rubia I, Browne, Hist. Jamaica 141 (Holotype LINN, n.v.). *Relbunium*.—**Galium hypocarpium** (L.) Endl. ex Griseb.

Vangueria A. L. Juss., Gen. Pl. 206. 1789. Type: Vangueria madagascariensis J. F. Gmel.

Vangueria madagascariensis J. F. Gmel., Syst. Nat., ed. 13, 2: 367. 1791. Type:

MASCARENE ISLANDS: Mauritius et Bourbon, 1770–1780, *P. Commerson s.n.* (Holotype P-JU, n.v.). Occasionally cultivated in tropical America and sparingly naturalized at least in Costa Rica. The name *Vangueria edulis* Lam., a synonym, has sometimes been applied to collections from the Neotropics.

Varneria L. Type: Varneria augusta L., Amoen. Acad. 4: 136. 1759. [Herein treated as a synonym of *Gardenia* L.]

Varneria augusta L., Amoen. Acad. 4: 136. 1759. Type: Not cited. According to Smith (1974), the description and illustration may be taken as the type.—**Gardenia augusta** (L.) Merr.

Virecta L. f., Suppl. 17, 134. 1781. Type: Virecta biflora L. f. [Herein treated as a synonym of *Sipanea* Aubl.]

Virecta biflora L. f., Suppl. 17, 134. 1781. Type: SURINAM: Without precise locality, *Dalberg s.n.* (presumably LINN, n.v.).—**Sipanea biflora** (L. f.) Cham. & Schltdl.

Warszewiczia Klotzsch, Flora 36: 716. 1853; Monatsber. Königl. Preuss. Akad. Wissensch. Berlin 1853: 496. 1853. Type: Warszewiczia coccinea (A. DC.) Klotzsch (Basionym: *Macrocnemum coccineum* Vahl.)

Warszewiczia coccinea (Vahl) Klotzsch, Monatsber. Königl. Preuss. Akad. Wissensch. Berlin 1853: 497. 1853. *Macrocnemum coccineum* Vahl, Symb. Bot. 2: 38. 1791. Type: TRINIDAD: Without precise locality, *von Rohr* (presumably C, n.v.).

Warszewiczia pulcherrima Klotzsch, Monatsber. Königl. Preuss. Akad. Wissensch. Berlin 1853: 497. 1853. Type: PANAMA: Veraguas, *von Warszewicz* (Holotype B, presumably destroyed).—**Warszewiczia coccinea** (Vahl) Klotzsch

Watsonamra Kuntze, Rev. Gen. Pl. 1: 302. 1891. Type: Watsonamra macrophylla (Benth.) Kuntze [Herein treated as a synonym of *Pentagonia* Benth.]

Watsonamra alfaroana Standl., J. Wash. Acad. Sci. 15: 287. 1925. Type: COSTA RICA: Alajuela, vicinity of Capulín, on the Río Grande de Tárcoles, 80 m, 2 Apr 1924, *P. C. Standley 40194* (Holotype US 1152712 (photos MEXU, PTBG)). *Pentagonia*. —**Pentagonia tinajita** Seem.

Watsonamra brachyotis Stand., Contr. U.S. Natl. Herb. 17: 443. 1914. Type: PANAMA: Darién, Marragantí, 3 Apr 1908, *R. S. Williams 999* (Holotype US 678351 (photos MEXU, PTBG)).—**Pentagonia brachyotis** (Standl.) Standl.

Watsonamra donnell-smithii Standl., Contr. U.S. Natl. Herb. 17: 442. 1914. Type: COSTA RICA: La Emilia, Llanuras de Santa Clara, 250 m, Apr 1896, *J. D. Smith 6590* (Holotype US 355178 (photos MEXU, PTBG)). —**Pentagonia donnell-smithii** (Standl.) Standl.

Watsonamra gymnopoda Standl., Contr. U.S. Natl. Herb. 17: 444. 1914. Type: PANAMA: Colón, Loma de la Gloria, near Fató (Nombre de Dios), 10–104 m, 8 Jul 1911, *H. Pittier 3858* (Holotype US 678935 (photos MEXU, PTBG); Isotype US 678934 (photos MEXU, PTBG)).—**Pentagonia gymnopoda** (Standl.) Standl.

Watsonamra macrophylla (Benth.) Kuntze, Rev. Gen. Pl. 1: 302. 1891. *Pentagonia macrophylla* Benth., Bot. Voy. Sulphur 105, *tab. 39*. 1845. Type: PANAMA: Panamá, forests between Panamá and Cruces, *Barclay s.n.* (Holotype BM, n.v.).—**Pentagonia macrophylla** Benth.

Watsonamra pittieri Standl., Contr. U.S. Natl. Herb. 17: 443. 1914. Type: PANAMA: San Blas, forests around Puerto Obladía, San Blas coast, 0–50 m, Aug 1911, *H. Pittier 4298* (Holotype US 679414 (photos MEXU, PTBG); Isotype US 679415 (photos MEXU, PTBG)). *Pentagonia*.—**Pentagonia pinnatifida** Seem.

Watsonamra pubescens Standl., Contr. U.S. Natl. Herb. 17: 441. 1914. Type: PANAMA: Canal Zone, around Tabernilla, along the railroad, 20–25 m, 6 Jul 1911, *H. Pittier 3822*

(Holotype US 678894 (photo PTBG); Isotype NY, n.v.).—**Pentagonia macrophylla** Benth.

Watsonamra wendlandii (Hook.) Kuntze, Rev. Gen. 302. 1891. *Pentagonia wendlandii* Hook., Bot. Mag. *pl. 5230*. 1861. Type: Described from cultivated material, probably from Costa Rica or Panama. Type not designated.—**Pentagonia wendlandii** Hook.

Wittmackanthus Kuntze, Rev. Gen. Pl. 1: 302. 1891. Type: Wittmackanthus stanleyanus (R. H. Schomb.) Kuntze (Basionym: *Calycophyllum stanleyanum* R. H. Schomb.)

Wittmackanthus stanleyanus (R. H. Schomb.) Kuntze, Rev. Gen. Pl. 1: 302. 1891. *Calycophyllum stanleyanum* R. H. Schomb., J. Bot. Hook. 3: 622. 1844. Type: GUYANA: Without precise locality, *Schomburgk 356/411 B* (Holotype K, n.v. (photo MO); Isotype NY, n.v.).

Xerococcus Oerst., Vidensk. Meddel. Dansk. Naturhist. Foren. Kjöbenhavn 1852: 52. 1853. Type: Xerococcus congestus Oerst. [Herein treated as a synonym of *Hoffmannia* Sw.]

Xerococcus congestus Oerst., Vidensk. Meddel. Dansk. Naturhist. Foren. Kjöbenhavn 1852: 52. 1853. Type: COSTA RICA: Turrialba, 3000 ft., *Oersted 11776* (Holotype C, n.v. (photos F, MO); Isotype K, n.v.). —**Hoffmannia congesta** (Oerst.) Dwyer